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Summary of Precision and Accuracy Assessments for the State and Local Air Monitoring Networks, 1982

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A comparison of the precision and accuracy from the Precision and Accuracy Reporting System and that from the independent performance audit program conducted by the Environmental Monitoring Systems Laboratory is given.

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SUMMARY OF PRECISION AND ACCURACY ASSESSMENTS FOR THE STATE AND LOCAL AIR MONITORING NETWORKS
1982

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FOREWORD

Measurement and monitoring research efforts are designed to anticipate potential environmental problems, to support regulatory actions by developing an in-depth understanding of the nature and processes that impact health and the ecology, to provide innovative means of monitoring compliance with regulations, and to evaluate the effectiveness of health and environmental protection efforts through the monitoring of long-term trends. The Environmental Monitoring Systems Laboratory, Research Triangle Park, North Carolina, has the responsibility for assessment of environmental monitoring technology and systems; implementation of agency-wide quality assurance programs for air pollution measurement systems; and supplying technical support to other groups in the Agency including the Office of Air and Radiation, the Office of Toxic Substances, and the Office of Enforcement.

Ambient air quality data collected by states and local agencies are used in planning the nation's air pollution control strategy, in determining if National Air Quality Standards are being achieved, and in determining long-term trends of air quality. Prior to the regulations of May 10, 1979, the procedures used in site selection, controlling equipment, and calculating and validating data varied considerably among agencies. To improve and make more uniform the quality assurance programs of the state and local agencies and to require the assessment and reporting of data quality estimates for precision and accuracy, the May 10, 1979 regulations were issued. Reporting of precision and accuracy data were required beginning for calendar year 1981. A previous report summarized the results for 1981. This report summarizes and evaluates the results for 1982.

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ABSTRACT

Precision and accuracy data obtained from State and local agencies during 1982 are summarized and evaluated. Some comparisons are made with the results previously reported for 1981 to determine the indication of any trends. Some trends indicating improvement in the precision and accuracy of monitoring data are given on a national and regional basis. The annual average results from each reporting organization are given so that comparisons may be made from 1981 to 1982 and also with other reporting organizations.

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SECTION 1

INTRODUCTION

The purpose of this document is to report the second year of data from the Precision and Accuracy Reporting System (PARS). Federal regulations promulgated on May 10, 1979, require quality assurance precision and accuracy (P&A)* data to be collected. Collection started January 1, 1981, according to requirements set forth in 40 CFR Part 58 Appendix A. These requirements provide for more uniform Quality Assurance programs and specific precision and accuracy reporting requirements across all State and local air monitoring agencies.

The major portion of this report consists of summarizations and evaluations of the P&A data obtained by the efforts of the States and local agencies. In addition, comparisons have been made of the accuracy data collected for PARS with the results of the National Performance Audit Program (NPAP) which has been an ongoing program conducted by the Environmental Monitoring Systems Laboratory (EMSL) since the early 1970's.

These summarizations and evaluations of precision and accuracy data serve the following purposes:

1. Quantitative evaluations of the quality of their monitoring data are available to State and local agencies.
2. A comparison of the data from all the agencies can indicate the need to improve quality assurance systems in specific reporting organizations.
3. An evaluation of the results may indicate a need for improvement in monitoring methodology.
4. The assessments provide users of data from the State and Local Air Monitoring Stations (SLAMS) network a quantitative estimate of the precision and accuracy of the ambient air quality data.

---

*When one speaks of precision and accuracy of measurement data,[1] one really means the precision and accuracy of the measurement process from which the measurement data are obtained. Precision is a measure of the "repeatability of the measurement process under specified conditions." Accuracy is a measure of "closeness to the truth."

Ambient air quality data, collected by States and local agencies since 1957, have been stored in the National Aerometric Data Bank (NADB). These data are used in (1) planning the nation's air pollution control strategy, (2) determining if the National Air Quality Standards are being achieved, and (3) determining long-term trends of air quality. Prior to the EPA air monitoring regulations of May 10, 1979, the procedures used in selecting monitoring sites, operating and controlling the equipment, and calculating, validating and reporting the data varied considerably among agencies. Frequently the procedures being used were not well-documented. These conditions made it difficult to intercompare data from different sites and agencies. Furthermore, little information was available on the reliability of the monitoring data.

To help alleviate these problems, EPA's air monitoring regulations imposed uniform criteria on network design, siting, quality assurance, monitoring methods, and data reporting after December 30, 1980. For example, only EPA reference, equivalent, or other EPA-approved air monitoring methods were to be used. Also, calibration standards were to be traceable to the National Bureau of Standards (NBS) or other authoritative standards. Further, the quality assurance systems of the states were required to be documented and approved by the EPA Regional Offices. Finally, the reporting organizations must also follow specific procedures when assessing the P&A of their measurement systems and must report the P&A data to EPA quarterly. Starting January 1, 1981, these regulations became effective for National Air Monitoring Sites (NAMS), and beginning January 1, 1983, for all State and Local Air Monitoring Stations.

The precision assessments were determined by performing repeated measurements on ambient-level "calibration" gases at two-week intervals for continuous methods, or by obtaining duplicate results from collocated samplers for manual methods. Table 1 summarizes the requirements for performing precision checks. The accuracy assessments were generally determined by analyzing blind audit materials traceable to NBS. Table 2 shows the concentration levels. During each calendar year, each site or instrument must be audited at least once. Details concerning the specific procedures and computations used to assess P&A are contained in the regulations.

TABLE 1. REQUIREMENTS FOR PERFORMING PRECISION CHECKS FOR SLAMS NETWORK

Parameter	Precision Check Level	Frequency
CO (continuous analyzer)	8 - 10 ppm	Once each 2 weeks
SO_2, NO_2, and O_3 (continuous analyzer)	0.08 - 0.10 ppm	Once each 2 weeks
TSP, SO_2, and NO_2 (manual)	Collocated sampler (Ambient concentration)	Once each 6 days
Pb	Duplicate strips (Ambient concentration)	Once each 6 days

TABLE 2. CONCENTRATION LEVELS FOR CONDUCTING ACCURACY AUDITS OF SLAMS NETWORK

Parameter	Level 1	Level 2	Level 3	Level 4
SO_2, NO_2, O_3 (continuous)	0.03-0.08 ppm	0.15-0.20 ppm	0.35-0.45 ppm	0.80-0.90 ppm
CO	3-8 ppm	15-20 ppm	35-45 ppm	80-90 ppm
TSP (flow only)		1.13-1.70 m^3/min		
SO_2 (manual)*	0.013-0.020 ppm	0.033-0.040 ppm	0.053-0.059 ppm	
NO_2 (manual)*	0.018-0.028 ppm	0.046-0.055 ppm	0.074-0.083 ppm	
Pb**	0.6-1.8 μg/m^3	3.5-5.9 μg/m^3		

* Concentration levels corresponding to flow rates of .2 L/min
** Concentration levels corresponding to flow rates of 50 cfm.

When a request is made to the NADB for ambient air quality monitoring data, the requestor receives the P&A data along with the routine monitoring data. The requestor, or user, of the data can feel more confident that the data are of the quality indicated by the assessments and that the data have been obtained from an agency having a planned and documented quality assurance system. The EPA can also rely on the data in producing its control strategies and determining whether standards have been met.

SECTION 2

NATIONAL RESULTS

NATIONAL DATA CAPTURE

The second year of data collected by State and local agencies for P&A has been compiled and summarized. Obvious improvements in the network operation have been made. Table 3 shows the improvement in data capture for the nation.

TABLE 3. NATIONAL PERCENT DATA CAPTURE FOR REQUIRED PRECISION AND ACCURACY

Pollutant	1981	1982	Relative % Change
CO	77	89	16
SO_2	82	93	13
NO_2	56	72	29
O_3	83	89	7
TSP	94	97	3

The automated NO_2 analyzers which tend to break down quite often had the worst percent data capture for the first two years. However, these analyzers had the largest increase in data capture from 1981 to 1982 of 29%, which indicates a substantial improvement. CO had the next largest percent change, an increase from 77% to 89%. SO_2 increased from 82% to 93%. TSP had the lowest % change between years, but it had very little room for improvement in collection of the precision and accuracy flow data.

1982 RESULTS FROM THE PARS PROGRAM

The measures of precision and accuracy are required to be computed and reported by the States and local agencies as percentage values. For percision, the repeatability for each check is measured as the deviation from expected values as a percentage of the expected value. For accuracy, the deviation of the audit value from the true value is measured as a percentage of the true value. For both precision and accuracy, 95 percent probability limits are computed for the percentage values from the average and standard deviations of the individual percentage values:

$$\overline{D} \pm 1.96\ S$$

where $\overline{D}$ = the average of the individual percent differences;
S = the standard deviation of the individual percent differences;*
1.96 = the multiplication factor corresponding to 95% probability.

NOTE: For the precision of manual methods obtained from paired observations, the standard deviation, S, is divided by $\sqrt{2}$, to obtain variability estimates that apply to individual reported values.

It is these upper and lower 95% probability limits which are reported and discussed in this report.

Moreover, it should be noted that the data and the evaluations presented in this report include any outlier values which may have been reported by the States and local agencies. It is possible that the presence of outliers might influence such comparisons by having undue impact on average values.

Table 4 exhibits the national averages for each of the manual pollutants. By examining the numbers of valid collocated data pairs (16,233) and the number of audits (6461) performed for TSP, one can estimate the amount of effort being spent in this country to obtain these data quality assessments.

TABLE 4. NATIONAL PRECISION AND ACCURACY PROBABILITY LIMIT AVERAGES FOR MANUAL METHODS

	Precision			Accuracy						
	Number of Valid Collocated Data Pairs	Probability Limits (%)		No. of Audits	Probability Limits (%)					
					Level 1		Level 2		Level 3	
Pollutant		Lower	Upper		Lower	Upper	Lower	Upper	Lower	Upper
TSP	16,233	-12	+13	6,461	--	--	-07	+07	--	--
Lead	1,669	-15	+16	692	-11	+08	-07	+04	--	--
Sulfur Dioxide	706	-38	+42	551	-13	+08	-09	+07	-08	+05
Nitrogen Dioxide	1,168	-29	+34	583	-07	+08	-07	+06	-05	+06

The precision limits reflect the repeatability of the methodology used in the field to collect and analyze the samples at ambient levels. The spread of the limits may be somewhat inflated due to measurements at relatively low concentration levels.

The accuracy of the manual methods indicates the limits at predetermined concentration levels for the chemical analysis performed in the samples for lead, sulfur dioxide, and nitrogen dioxide. For the particulate matter, the accuracy measurement is for the flow rate only. The probability limits for manual accuracy are very good and reflect the quality of work done in the chemical laboratories for lead, sulfur dioxide, and nitrogen dioxide analyses, and in the field for flow rate measurement for particulate matter. Because of the continual replacement of the manual SO_2 and NO_2 methods with continuous methods, further discussion of the manual methods is limited. The detailed results, however, are tabulated in Appendix B for each reporting organization.

The precision and accuracy limits for automated methods are presented in Table 5. Apparent from the number of precision checks, for example 23,144 for SO_2, the effort expended for the collection of quality assurance precision and accuracy data is appreciable, but necessary to assess data quality. Details of the results are discussed in the analysis section.

TABLE 5. NATIONAL PRECISION AND ACCURACY PROBABILITY LIMIT AVERAGES FOR AUTOMATED ANALYZERS

	Precision			Accuracy						
	No. of Precision Checks	Probability Limits (%)		No. of Audits	Probability Limits (%)					
					Level 1		Level 2		Level 3	
		Lower	Upper		Lower	Upper	Lower	Upper	Lower	Upper
SO_2	23,144	-14	+09	1,367	-16	+10	-12	+09	-12	+09
O_3	18,964	-10	+09	1,524	-12	+10	-09	+08	-09	+08
CO	13,089	-09	+07	1,208	-11	+10	-06	+06	-06	+05
NO_2	6,876	-13	+13	479	-21	+17	-14	+10	-12	+07

NATIONAL PRECISION RESULTS COMPARISON

While this report represents the second year of precision and accuracy data, it is too early to determine reliably any trends analysis. However, some tentative observations can be made. As can be seen in Figure 1, some minor changes have occurred since the start-up in 1981. O_3 and CO showed the most overall change in precision with a decrease in the limit spread for both upper and lower limits. For TSP and SO_2 the upper limits stayed the same while the lower limit increased from -13 to -12, decreasing overall variability only slightly. The spread or variability for NO_2 precision probability limits remained the same but did exhibit an upward shift, possibly eliminating a slight average bias which existed the first year.

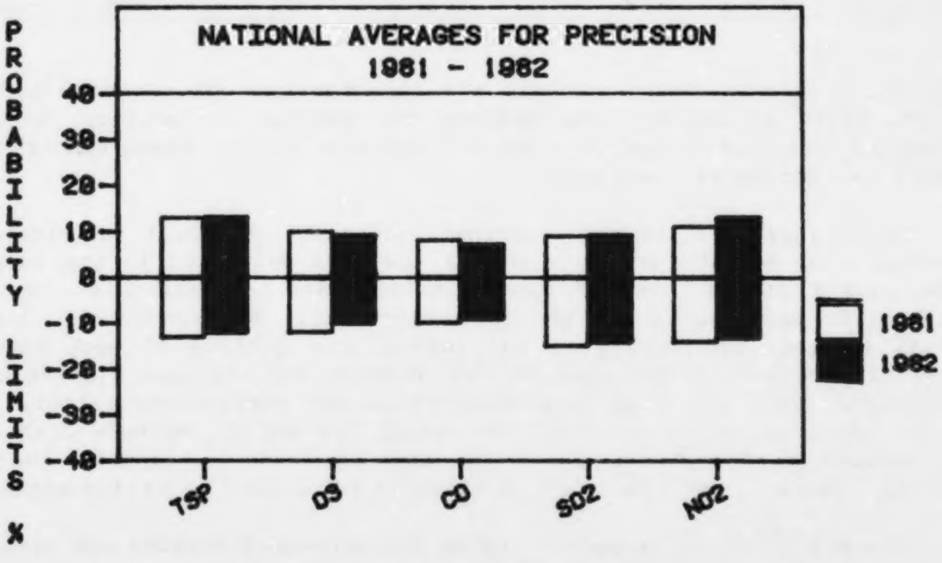

Figure 1. National Precision Averages for 1981 to 1982

NATIONAL ACCURACY RESULTS COMPARISON

Accuracy for TSP, which is determined from an air flow measurement on the high volume sampler, deteriorated slightly from 1981 to 1982. Figure 2 displays the national accuracy average for TSP and each of the three levels for continuous O_3, CO, SO_2, and NO_2.

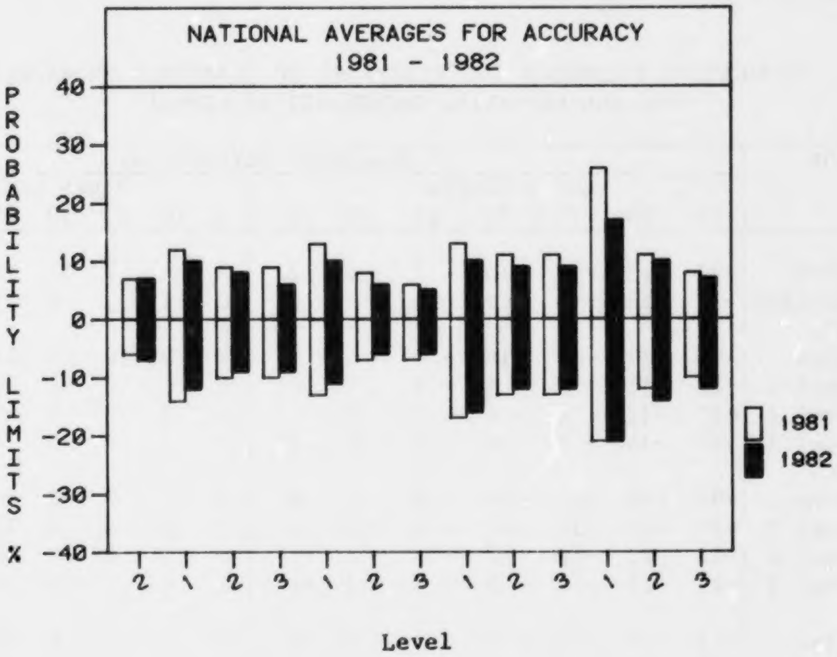

Figure 2. National Accuracy Averages for 1981 to 1982

For the continuous analyzers, it is obvious from Figure 2 that the first level of each pollutant has a wider range than the other levels. This is to be expected with low concentration values. Levels 2 and 3 are expected to be similar to each other and show less variability than level 1, as expected.

Examination of Figure 2 demonstrates the improvements that have been made across the country in the accuracy measurements. For each level of ozone, the range of the limits have decreased from 1981 to 1982. The same trend occurs for both SO_2 and CO. NO_2 improved dramatically for level 1 measurements, while the range of the limits for Levels 2 and 3 remained basically the same.

NATIONAL FREQUENCIES

Table 6 contains the 1982 frequency distribution for precision probability limits and accuracy probability limits at level 2. The frequencies are based on the total number of reporting-organization-quarters of data. The individual quarter of data consists of an upper and lower probability limit for precision, and upper and lower probability limits for accuracy for each of the levels. Only level 2 accuracy is presented because it is very similar to level 3, and level 1 tends to be inflated because of low concentration levels. The narrower the distribution, the better the data quality assessment. For example, for CO, 90% of the precision probability limits reported were within -15% or +16%. If a reporting organization reported limits outside the -15 or +16 range, they knew they fell in the worst 10% percentile. It can be seen from both Figure 2 and Table 6 that CO shows the tightest range of the pollutants presented.

TABLE 6. CUMULATIVE FREQUENCY DISTRIBUTIONS OF QUARTERLY PROBABILITY LIMITS FOR ALL REPORTING ORGANIZATIONS (1982)

Pollutant Level	Frequency Percentiles													
	Lower Limits							Upper Limits						
	95	90	75	50	25	10	5	5	10	25	50	75	90	95
TSP														
Precision	-27	-23	-16	-10	-7	-4	-2	3	4	7	11	16	25	33
Accuracy(ACC)	-17	-13	-9	-6	-3	-1	0	0	1	3	6	9	14	19
NO_2 Cont.														
Precision	-99	-77	-39	-18	-9	-4	0	0	2	10	25	65	90	99
ACC Level 1	-20	-11	-8	-5	-3	0	0	0	1	4	7	10	15	23
ACC Level 2	-15	-12	-6	-4	-2	0	1	1	1	3	5	7	12	17
ACC Level 3	-17	-14	-6	-4	-2	0	1	0	1	4	5	6	9	14
SO_2 Cont.														
Precision	-99	-99	-63	-24	-8	0	0	0	0	9	22	91	99	99
ACC Level 1	-32	-25	-17	-10	-8	-5	-3	0	1	4	6	12	19	24
ACC Level 2	-27	-20	-10	-7	-3	-2	-1	0	0	3	4	9	16	22
ACC Level 3	-23	-17	-10	-5	-3	-2	-1	-1	0	2	4	6	14	17
CO														
Precision	-19	-15	-11	-8	-5	-3	-2	0	1	3	6	10	16	18
ACC Level 1	-29	-26	-15	-8	-4	-1	1	-3	-1	4	9	16	22	29
ACC Level 2	-18	-14	-9	-5	-2	0	2	-2	0	3	6	9	13	17
ACC Level 3	-21	-14	-8	-4	-2	0	1	-1	0	2	4	8	12	16
SO_2														
Precision	-28	-24	-17	-13	-10	-7	-5	1	2	5	8	12	17	20
ACC Level 1	-37	-30	-22	-13	-7	-4	-1	-5	-1	3	8	15	24	28
ACC Level 2	-32	-24	-16	-11	-6	-3	0	-3	0	4	8	13	19	22
ACC Level 3	-28	-23	-16	-10	-6	-2	0	-2	0	4	8	13	18	23
NO_2														
Precision	-34	-22	-18	-11	-7	-4	-2	1	3	6	10	18	23	28
ACC Level 1	-66	-45	-26	-16	-9	-3	0	-7	0	5	13	25	39	43
ACC Level 2	-33	-27	-16	-11	-6	-2	-1	-5	-2	2	7	15	27	35
ACC Level 3	-33	-24	-15	-9	-5	-3	-1	-5	-4	0	5	11	21	32
O_3														
Precision	-20	-17	-13	-9	-6	-3	0	2	3	6	8	12	16	19
ACC Level 1	-28	-23	-16	-11	-5	-1	1	0	0	5	9	14	21	27
ACC Level 2	-21	-18	-13	-8	-4	-2	1	-1	0	3	7	11	16	22
ACC Level 3	-23	-17	-12	-8	-4	-2	0	-1	0	3	6	11	16	18
P_b														
Precision	-43	-33	-21	-11	-5	-1	0	1	2	5	10	20	32	51
ACC Level 1	-30	-24	-16	-8	-3	0	1	-2	0	3	7	10	22	26
ACC Level 2	-21	-15	-10	-6	-3	0	1	-4	-1	1	4	8	10	16

SECTION 3

REGIONAL RESULTS

REGIONAL DATA CAPTURE

For the year 1982, the numbers of required reporting organizations by pollutant are listed in Table 7. Although the reporting organizations have been submitting P&A data for the manual methods (Pb, SO_2, and NO_2), these data were not required by the regulations to be reported until 1983. As shown in the table, Regions 4 and 5 have the largest number of reporting organizations.

TABLE 7. TOTAL NUMBER OF REPORTING ORGANIZATIONS REQUIRED TO REPORT BY POLLUTANT FOR THE YEAR 1982

	Automated Methods				Manual Methods			
Region	CO C42101	SO_2 C42401	NO_2 C42602	O_3 044201	TSP I11101	Pb I12128	SO_2 I42401	NO_2 I41602
01	2	6	1	4	6	0	0	0
02	3	2	2	2	3	0	0	0
03	5	9	5	8	14	0	0	0
04	9	9	2	16	24	0	0	0
05	11	17	7	17	24	0	0	0
06	5	5	4	7	12	0	0	0
07	2	7	3	7	11	0	0	0
08	2	3	1	2	7	0	0	0
09	8	4	3	9	9	0	0	0
10	2	2	1	2	5	0	0	0
Nation	49	64	29	74	115	0	0	0

The breakdown of data completeness (defined as the percentage of reporting organizations which reported P&A data to EPA as required each quarter) is given in Table 8. For TSP each region's data was 95% complete or better for the year, except for Region 10 which was 88% complete. Considering that many ozone sites do not operate in the winter months, the 89% data completeness is a very respectable percentage.

REGIONAL COMPARISONS

In Figures 3 through 8, comparisons are given by Region for each pollutant method of the precision and accuracy probability limits for 1981 and 1982. The results shown on these figures are the arithmetic average of the upper 95% probability limits for all reporting organization-quarters in each Region and the arithmetic average of the lower 95% probability limits for all reporting organization-quarters in each Region for each year. About half of the reporting organizations in each Region had wider limits; about half had narrower limits than shown.

TABLE 8. PERCENTAGE OF SLAMS SITES WITH COMPLETE DATA IN PARS FOR THE YEAR 1982

	Automated Pollutants				Manual Pollutants			
Region	CO C42101	SO_2 C42401	NO_2 C42602	O_3 044201	TSP I11101	PB I12128	SO_2 I42401	NO_2 I41602
01	100	97	100	83	100	---	---	---
02	90	100	100	100	98	---	---	---
03	100	98	100	96	100	---	---	---
04	88	83	38	82	99	---	---	---
05	79	92	58	87	95	---	---	---
06	88	94	71	92	76	---	---	---
07	67	74	69	77	95	---	---	---
08	100	80	88	100	99	---	---	---
09	88	86	69	88	96	---	---	---
10	100	100	38	100	88	---	---	---
Nation	89	93	72	89	97	---	---	---

NOTE: --- Means no data was required

The average precision and accuracy for each Region is shown in Figures 3a and 3b. The differences in precision and accuracy between 1981 and 1982 are relatively small, except in a few instances. More Regions show improvement than do not. Another year's data are needed to establish any definite trends. However, it appears that Regions 10 and 2 show the most improvement.

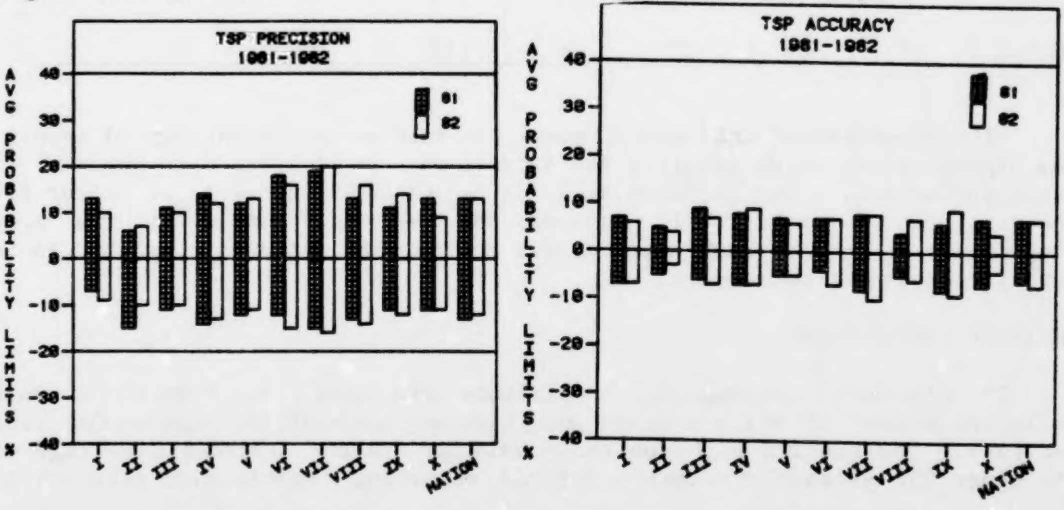

Figure 3a. Precision

Figure 3b. Accuracy

Figure 3. TSP precision and accuracy for 1981 to 1982.

No consistent changes are evident in the variability of the precision or the accuracy results for TSP. The apparent biases in precision results for Regions 1 and 2, however, have improved.

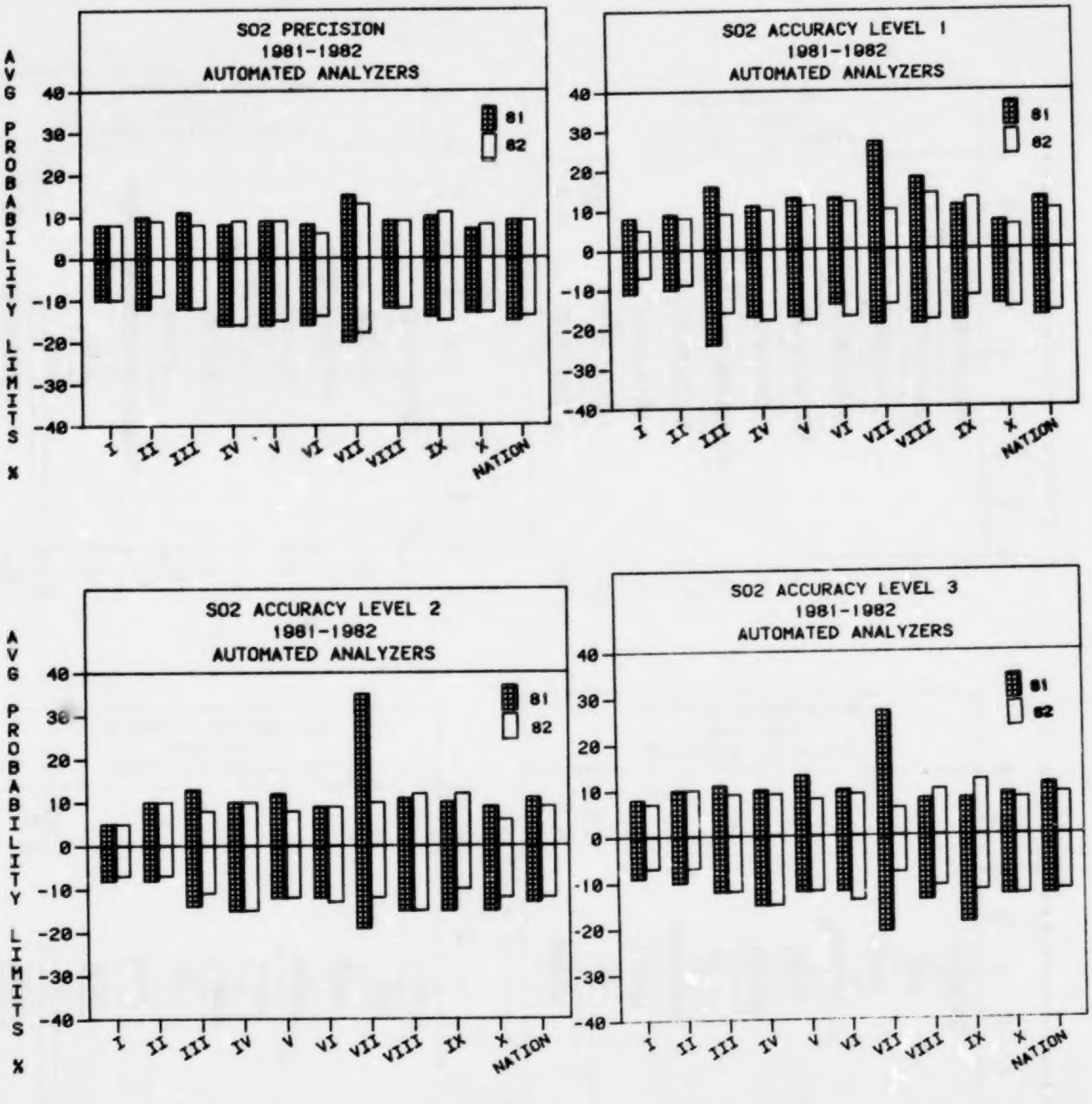

Figure 4. Ozone precision and accuracy.

O_3 - Region 7 showed the most improvement in Ozone Precision from 1981, while Regions 3 and 10 had the next largest improvement. Region 2 had the tightest probability limits of -10 and +08. Region 8, which had the tightest limits of -13 and +05 in 1981 slipped to the widest limits of -13 and +10 in 1982. Using accuracy level 2 as an indicator, since level 1 is affected by the low concentration levels and level 3 is very similar to level 2, we can see the overall improvement in the data. Region 7 made the most improvement in tightening their limits to -08 and +5. Region 1 continued to have the tightest limits at -06 and +06. Region 10 experienced the worst decline in limits to -16 and +16. The poor performance in one State was the reason for the decline.

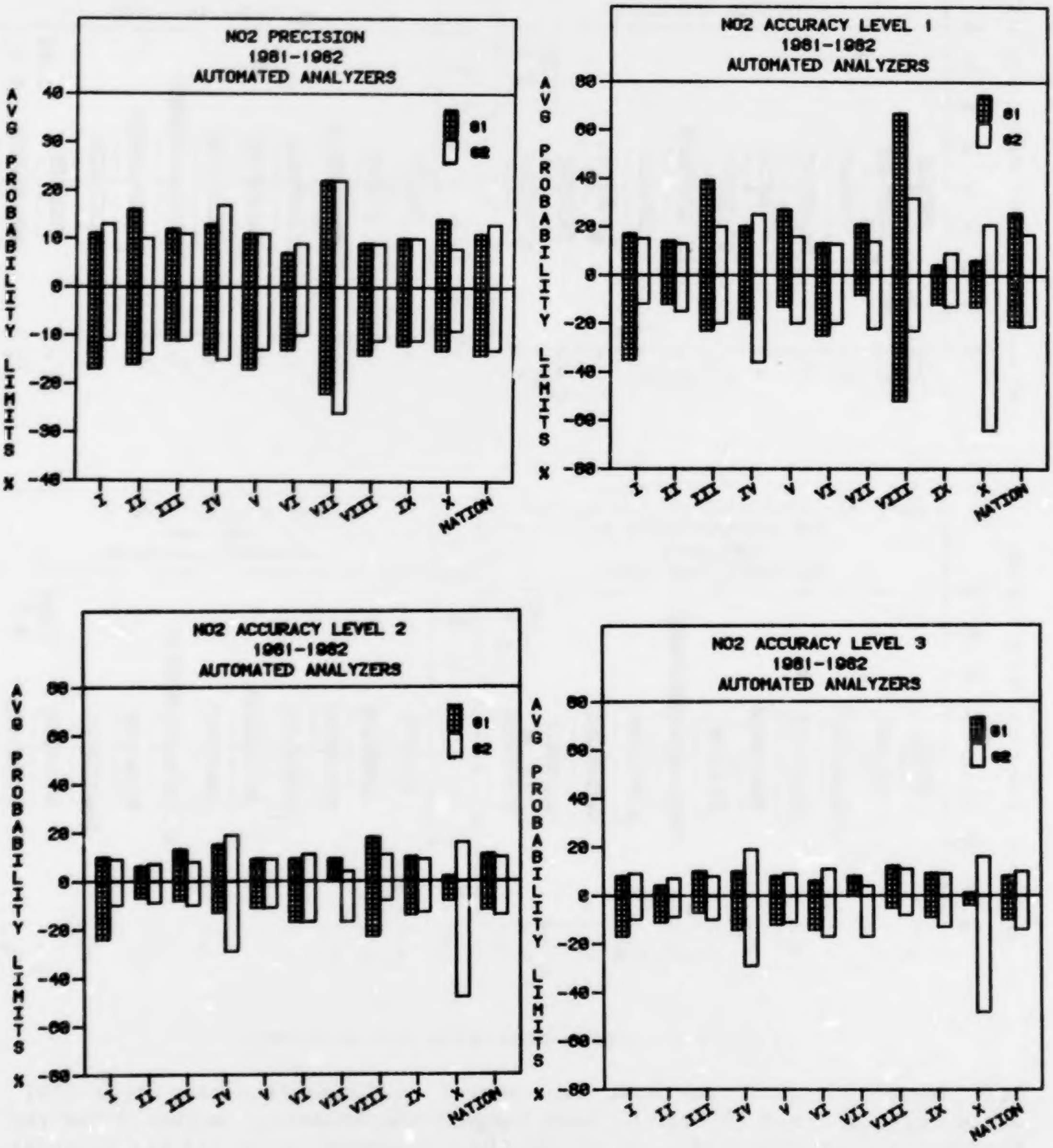

Figure 5. Automated NO_2 precision and accuracy by Region for 1981 to 1982.

NO_2 - NO_2 has only 29 reporting organizations nationwide that are required to report P&A data. Three Regions have only 1 reporting organization each. Figure 5 depicts the large variability experienced by the reporting organizations. For example, in 1982, Region 10 had the best precision limits at -09 and +08, but during 17 audits had the worst accuracy limits obtained by any Region. Regions 8 and 1 showed the most improvement in accuracy, while Region 4 was next behind Region 10's worst.

Figure 6 shows the activity for continuous SO_2 analyzers. With the exception of considerable improvement for accuracy in Regions 7 and 3, there is steady improvement in both precision measurements and accuracy measurements for SO_2.

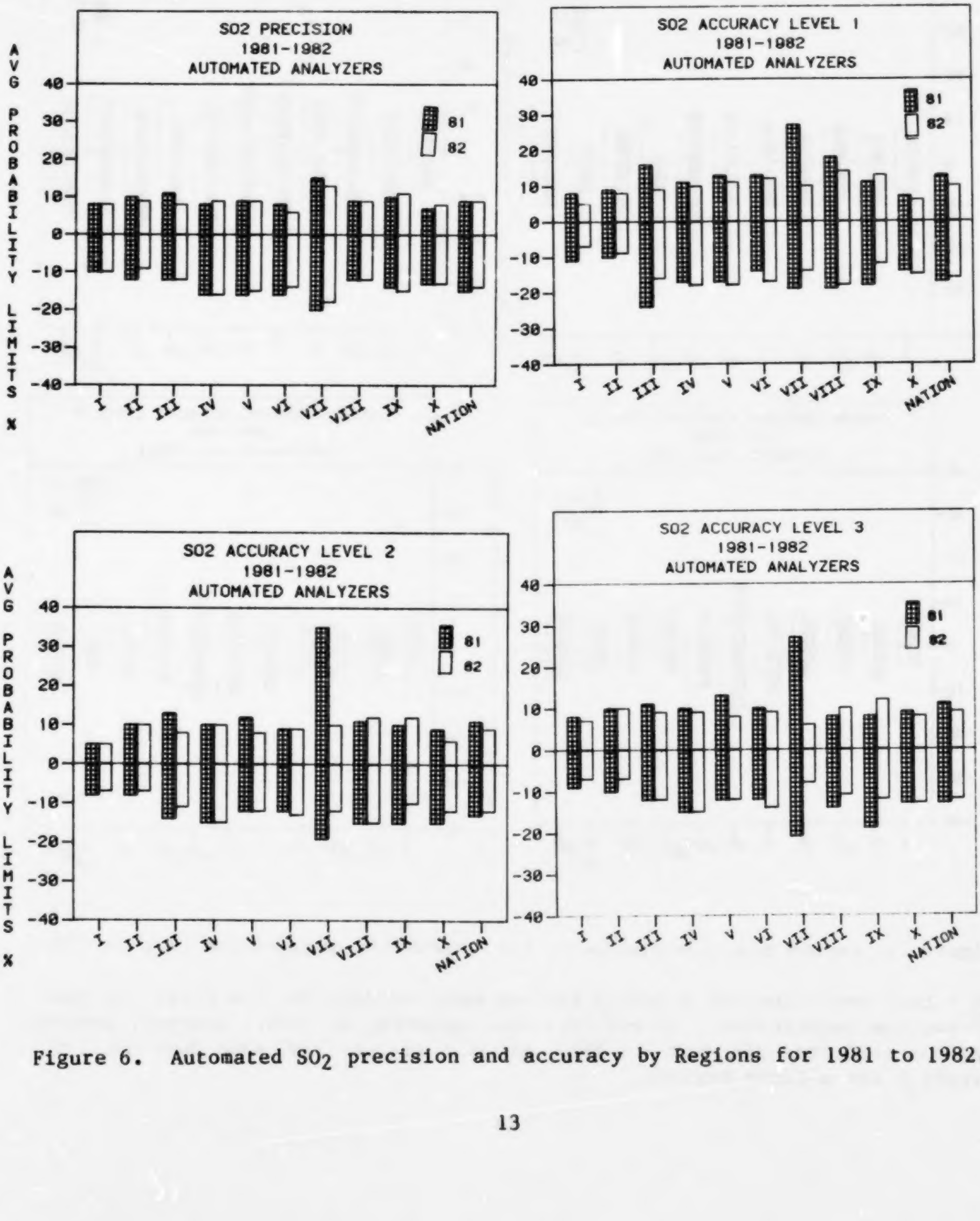

Figure 6. Automated SO_2 precision and accuracy by Regions for 1981 to 1982.

CO - Carbon monoxide data for precision and the three levels for accuracy are shown in Figure 7. Overall improvement is seen in both precision and accuracy for CO. For precision only, Region 8 showed a large decline in precision measurements. However, the large negative bias in 1981 does not persist into 1982. For accuracy every Region shows improvement from the 1981 limits for CO, with Region 6 showing the most dramatic improvement.

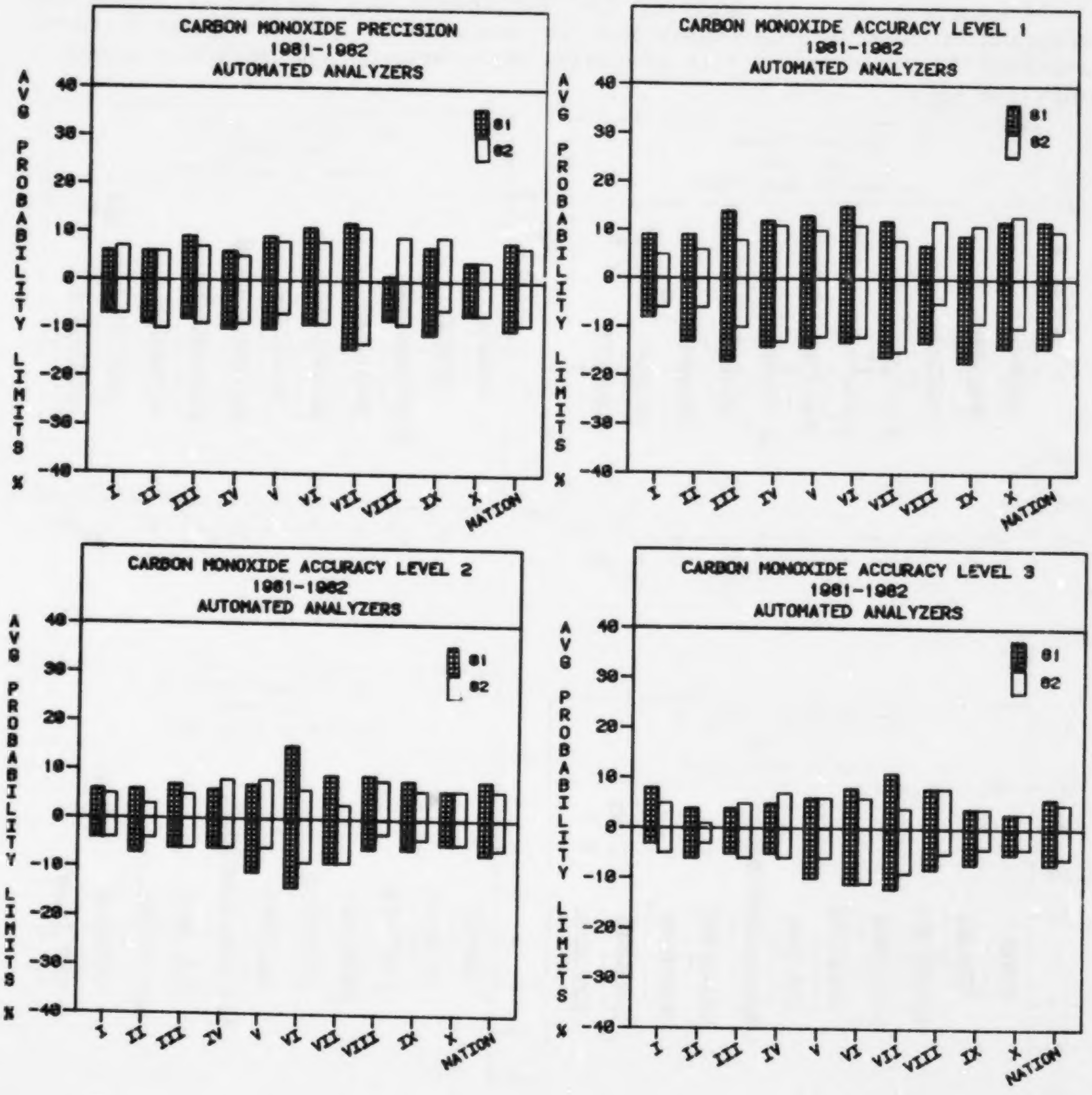

Figure 7. Carbon Monoxide precision and accuracy by Regions for 1981 to 1982.

Pb - Lead precision and accuracy has not been required for the first two years of the new regulations. It was required beginning in 1983. However, several Regions collected P&A data in 1981 and all Regions had some data in 1982. Figure 8 shows those Regions.

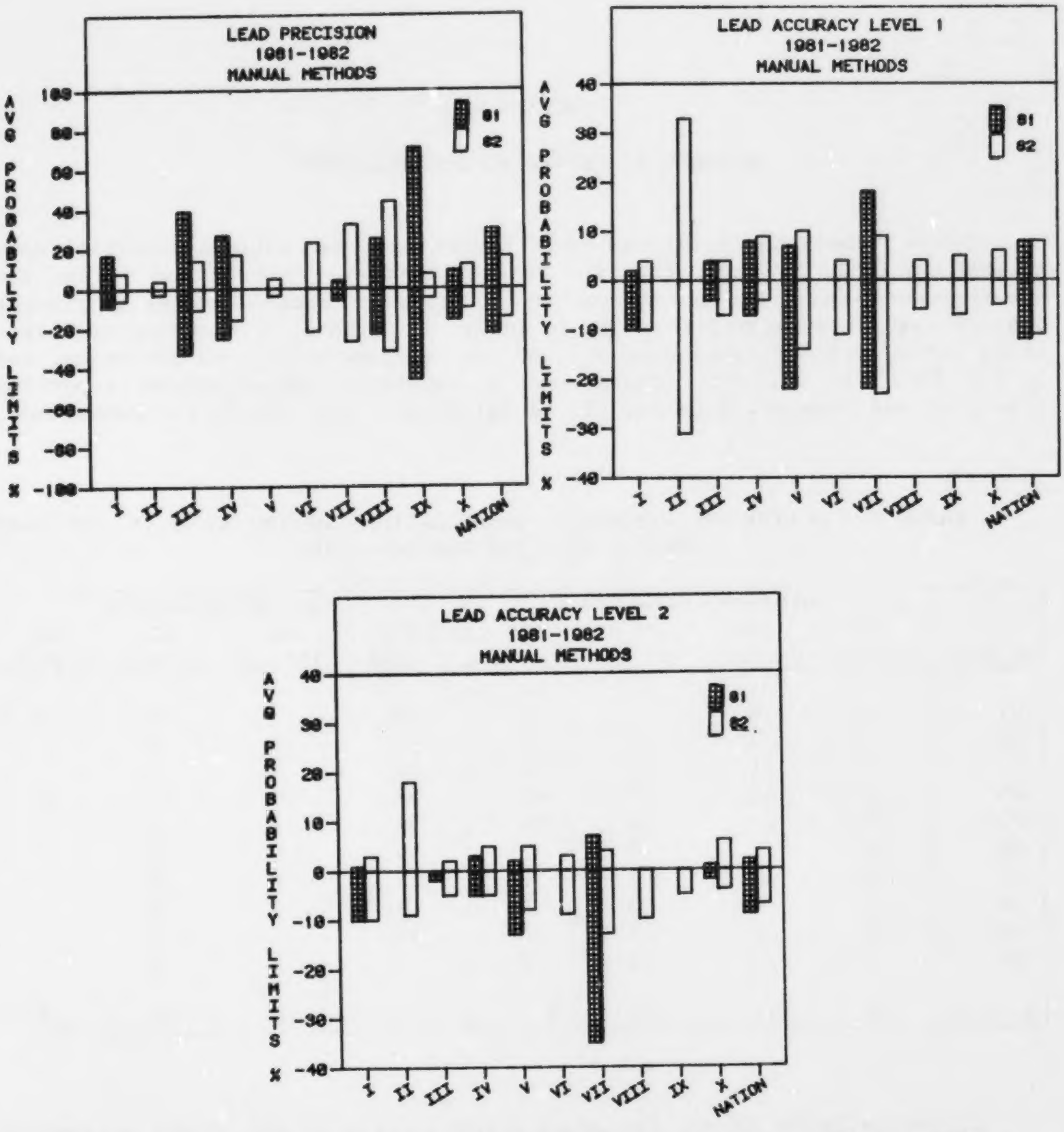

Figure 8. Lead precision and accuracy by Region for 1981 to 1982.

SECTION 4

RESULTS BY REPORTING ORGANIZATIONS

Table 9 shows the total number of Reporting Organizations reporting data to EMSL in 1982. By comparing the numbers between Tables 7 and 9, one can see the extra effort exerted by some of the State and local agencies to provide quality assurance information. There are an additional 59 reporting organizations for CO, 49 for continuous SO_2, 57 for continuous NO_2, 43 for ozone, and 30 for TSP. In addition, there are 78 reporting organizations reporting precision and accuracy data for Pb, 34 for manual SO_2, and 37 for manual NO_2.

TABLE 9. NUMBER OF REPORTING ORGANIZATIONS HAVING DATA IN THE PARS MASTER FILE FOR THE YEAR 1982

	Automated Pollutants				Manual Pollutants			
Region	CO C42101	SO_2 C42401	NO_2 C42602	O_3 C44201	TSP 111101	PB 112128	SO_2 142401	NO_2 142602
01	6	6	3	6	6	3	0	0
02	3	3	2	3	3	2	0	0
03	9	11	12	12	16	4	0	1
04	32	35	29	37	37	29	27	28
05	18	22	13	24	33	11	2	2
06	12	11	10	10	14	9	2	3
07	9	10	5	10	12	8	0	0
08	5	4	3	3	9	2	0	0
09	10	7	7	10	10	6	2	2
10	4	4	2	2	5	4	1	1
Nation	108	113	86	117	145	78	34	37

Listed in Table 10 are frequency distributions of the annual arithmetic averages for each reporting organization and pollutant.

To check on an individual reporting organization's annual average and see how it compares to all the other reporting organizations, refer to Appendix B for the individual reporting organization's average, then compare those numbers with the frequencies listed in Table 11. For example, reporting organization 48002, whose TSP precision limits are -08 and +08 fall within the 25 percentiles which means reporting organization 48002 is in the best 25th percentile of all reporting organizations.

TABLE 10. CUMULATIVE FREQUENCY DISTRIBUTIONS OF ANNUAL AVERAGE P & A DATA FOR ALL REPORTING ORGANIZATIONS

Pollutant Level	Frequency Percentiles													
	Lower Limits							Upper Limits						
	95	90	75	50	25	10	5	5	10	25	50	75	90	95
TSP														
Precision	-28	-20	-16	-11	- 8	- 6	-5	4	6	8	11	16	24	29
Accuracy(ACC)	-15	-12	- 9	- 6	- 4	- 3	-2	2	3	4	6	10	14	15
CO														
Precision	-16	-14	-12	- 8	- 5	- 4	-3	1	2	5	7	10	13	16
ACC Level 1	-29	-22	-14	-10	- 6	- 2	-1	-1	3	5	8	14	21	22
ACC Level 2	-15	-13	-10	- 6	- 3	- 1	1	0	2	4	6	8	11	13
ACC Level 3	-19	-13	- 8	- 5	- 3	- 2	0	0	1	3	5	8	11	13
SO_2														
Precision	-26	-24	-17	-14	-10	- 8	-8	3	4	6	8	12	15	19
ACC Level 1	-37	-33	-21	-15	-10	- 7	-6	1	2	6	10	14	21	25
ACC Level 2	-28	-21	-16	-13	- 8	- 6	-3	4	1	5	9	12	15	17
ACC Level 3	-26	-20	-15	-11	- 8	- 5	-3	1	2	5	9	12	15	20
NO_2														
Precision	-35	-23	-17	-12	- 8	- 6	-4	4	6	8	10	16	21	29
ACC Level 1	-64	-48	-28	-20	-11	- 5	-2	-9	0	6	15	21	27	49
ACC Level 2	-49	-32	-18	-12	- 8	- 3	-2	-2	0	3	6	16	21	25
ACC Level 3	-43	-24	-16	-10	- 7	- 4	-4	-3	0	1	5	12	18	20
O_3														
Precision	-18	-17	-13	- 9	- 7	- 5	-3	4	5	6	9	12	15	19
ACC Level 1	-25	-20	-16	-12	- 7	- 3	-1	1	4	6	9	12	19	24
ACC Level 2	-19	-16	-12	- 8	- 5	- 2	-1	-1	1	4	7	10	15	20
ACC Level 3	-22	-16	-12	- 8	- 5	- 3	-1	-1	1	4	6	10	13	17
Pb														
Precision	-45	-22	-22	-10	- 5	0	0	0	2	5	12	20	33	41
ACC Level 1	-22	-19	-16	- 7	- 4	- 2	-1	-3	0	3	6	10	16	18
ACC Level 2	-15	-14	-10	- 7	- 4	- 2	-1	-3	0	1	4	7	17	12

Appendix B shows the annual arithmetic averages of the upper and lower probability limits reported each quarter for each reporting organization. For some calendar quarters the limits were more extreme than shown; for some calendar quarters the limits were better than shown. Any user of monitoring data from some specific site and time period should obtain, from the local air monitoring agency, the precision and accuracy data for the specific sites and time periods involved.

Many reporting organizations showed a large improvement in their data from 1981 to 1982. Tables 11a and 11b show the 10 most improved reporting organizations by pollutant for precision and accuracy, based on the decrease in the range of the probability limits.

TABLE 11a. THE 10 MOST IMPROVED REPORTING ORGANIZATIONS FOR PRECISION

	Manual Methods	Automated Methods			
Rank	TSP	CO	O_3	NO_2	SO_2
1	04002	29200	29200	01014	36003
2	26002	28003	36003	10018	10002
3	01012	42001	03200	37102	36007
4	19001	10012	23002	26001	01012
5	36005	06001	36001	39003	26001
6	51001	50001	46001	10012	26005
7	39003	26002	36009	08001	23002
8	15003	36006	44005	45002	25100
9	36002	36008	06001	11010	01013
10	45003	46001	01013	39001	37101

*tie 15101
16003

TABLE 11b. THE 10 MOST IMPROVED REPORTING ORGANIZATIONS FOR ACCURACY AT LEVEL 2

	Manual Methods	Automated Methods			
Rank	TSP	CO	O_3	NO_2	SO_2
1	03300	11010	16001	37101	10016
2	28002	32001	15010	08001	36007
3	01015	29200	10012	36014	32002
4	10015	14001	48003	48003	26001
5	14003	05036	16003	18002	45002
6	50002	48001	14003	26003	36006
7	04002	47001	21005	04001	39003
8	27003	16002	08001	38001	37102
9	45004	34001	10016	11010	10002
10	51001	37103	45002	36010	37101

**08001 tie
23002

Some of the decreases in the ranges of the probability limits were quite substantial -- as much as 67%. Although approximately half of the reporting organizations actually showed increases, the increases were, in general, not as large as the decreases.

SECTION 5

FURTHER EVALUATION OF PARS DATA

Some interesting comparisons can be made by considering the corresponding national averages of Tables 4 and 5 and the 50-percentile values of the probability limits of Table 6. Table 12 compares these limits by considering the spread, or range, of the limits.

TABLE 12. COMPARISON OF THE 50-PERCENTILE FREQUENCY DISTRIBUTION VALUES WITH THE NATIONAL AVERAGES

		National Average			50-Percentile Values		
		Lower Limit	Upper Limit	Range	Lower Limit	Upper Limit	Range
Manual Methods							
TSP	Precision	-12	13	25	-10	10	20
	Accuracy*	- 7	7	14	- 6	6	12
Pb	Precision	-15	16	31	-10	12	22
	Accuracy	- 7	4	11	- 7	4	11
NO_2	Precision	-29	34	63	-18	25	43
	Accuracy	- 7	6	13	- 4	5	9
SO_2	Precision	-38	42	80	-24	22	46
	Accuracy	- 9	7	16	- 7	4	11
Continuous Methods							
CO	Precision	- 9	7	16	- 8	6	14
	Accuracy	- 6	6	12	- 5	6	11
O_3	Precision	-10	9	19	- 9	8	17
	Accuracy	- 9	8	17	- 8	7	15
NO_2	Precision	-13	13	26	-11	10	21
	Accuracy	-14	10	24	-11	7	18
SO_2	Precision	-14	9	23	-13	8	21
	Accuracy	-12	9	21	-11	8	19

*All accuracy values for all pollutants are for Level 2.

In all cases the spreads (ranges) of the probability limits are somewhat greater for precision than for accuracy and considerably so for the manual SO_2 and manual NO_2 methods. These differences are consistent for both the National averages and the 50-percentile values. These same relationships also existed for 1981. This means that the short-term within-sampler variability (precision) is larger than the variability of accuracy which includes variations between, or among, samplers as well as imprecision within samplers. This may seem contradictory at first, but giving consideration to exactly how the results are obtained and what the results represent will provide a rational explanation.

TSP. In the case of TSP, the precision results are obtained from collocated sampler data. They introduce variability from the analytical filter weighing process, the filter handling and conditioning process, and also the flow rate measurement process; whereas the accuracy audit is a check only on the flow rate measurement. Further, the collocated sampler results are obtained at all ambient concentrations above 1 $\mu g/m^3$, the detection limit for the method. At low concentration levels the relative variability is greater than at higher concentrations. The combined effects of these two causes explain the wider limits for precision.

Manual SO_2 and NO_2. Similar to the TSP data, the precision results are obtained from collocated sampler data. They introduce variability from the flow measurement, absorbing solutions, sampling, sample handling, and storage effects (stability) of the samples as well as the laboratory analytical portion of the method; whereas the accuracy audit is a check only on the laboratory analytical portion of the method. Further, the collocated sampler results are obtained at all ambient concentrations above the detection limits of the methods. Many of these concentrations are below the concentrations of the accuracy audits. At lower concentrations, the relative variability is greater than at higher concentrations.

As noted from Table 12, these differences are considerable, indicating that only a small portion of the variability results from the laboratory analytical part of the method. A very considerable amount of variability of the method is attributed to other portions of the measurement process. The very wide limits of uncertainty attributed only to the imprecision of these methods strongly emphasizes that the manual methods should be replaced by the continuous anlayzers. Alternatively, if any reliance is to be placed on individual daily data from the manual methods, all of the various portions of the measurement processes must be much more closely controlled, if possible.

Pb. The precision estimates for Pb are obtained from the analysis of duplicate strips from the same hi-vol filter. Consequently, actual variability of Pb content across the length of the filter, filter handling (with possible loss of particulate), variation in cutting filter strips, and the extraction of real-world particulate are involved in addition to the chemical analytical portion of the method. The accuracy audit data are obtained from the chemical analysis of strips to which known amounts of water-soluble Pb salts have been added and thus do not involve the other portions of the measurement process, nor do they involve real-world particulates.

Further, similar to the other manual methods (TSP, NO_2, and SO_2), the precision estimates are obtained at all concentrations above the detection limit. Many of these concentrations are less than those of the accuracy audits. At lower concentrations, the relative variability is expected to be greater than at higher concentrations.

Manual Methods (General). To make valid comparisons of the precision and accuracy data, such comparisons should be made at the same concentration levels. Only then will it be possible to determine whether the larger variabilities of the precision estimates are due to differences in concentration level or to the larger scope of the measurement system involved.

Such comparison studies can be accomplished when the raw concentration data are obtained from the State and local agencies for each sample day as specified by the proposed regulation revisions to Appendix A of 40 CFR, Part 58. Now only the reporting organizations could perform such studies since they have the raw data available.

The estimation of the magnitude of the contributions of the various sources of variability to the total measurement processes could be systematically studied in specially designed experiments.

CO, SO_2, NO_2, O_3 (Continuous Methods). For these continuous measurement methods, the precision assessments reflect the within-instrument variability obtained from bi-weekly checks at relatively low concentrations, namely

8 - 10 ppm for CO
and .08 -.10 ppm for SO_2, NO_2, and O_3.

In comparison, the accuracy audits include between-instrument variability as well as imprecision, but are conducted at higher concentrations for levels 2 and 3.

Level 2	15 - 20 ppm for CO .15 -.20 ppm for SO_2, NO_2, and O_3.
Level 3	35 - 45 ppm for CO .35 -.45 ppm for SO_2, NO_2, and O_3.

Level 1 accuracy audits are conducted at concentrations of

.03 -.08 for CO
3 - 8 for SO_2, NO_2, and O_3.

At Level 1, concentrations less than those for the precision checks, the probability limits for accuracy are wider than for precision.

COMPARISON OF NATIONAL AVERAGES AND 50-PERCENTILE VALUES

With reference again to Table 12, in all cases the spreads (ranges) of the National Average values for both precision and accuracy are greater than for the corresponding 50-Percentile values. The most logical explanation is that the National average values are unduly influenced by extreme values. If the distributions of the upper probability limits and the lower probability limits were near normal, as they should be, the 50-Percentile values should closely agree with the National average values.

An evaluation of the shape of the distributions does in fact show that the distributions are not normal due to an excessive number of extreme values (i.e., values in the tails of the distribution). (See Figures 9 through 12, which are plots of the frequency distributions on probability plotting paper). If the distributions were normal, the plots would appear as straight lines.

All of the distributions of the upper and lower probability limits are generally symmetric about zero. The only exception is for the SO_2 continuous method, for both precision and accuracy. This can be observed from the plots on the normal probability paper, Figures 11 and 12. For precision checks, the distribution of the lower probability limits is biased from 5 to 7 percent on the negative. A similar observation was made for 1981 data. This means that, on the average, the precision checks resulted in values about 5 percent less than the assumed concentrations. No solid explanation can be stated for this trend. One possible explanation is that the relatively low concentrations of SO_2 (0.08 0.10 ppm) in cylinders specially prepared for precision checks may degrade after preparation. For accuracy audits, the negative bias is from 3 to 5 percent. This means that on the average, the results of the accuracy audits were from 3 to 5 percent less than the assessed concentrations of the audit gases. Again, it may be possible that this bias represents a degradation of the SO_2 audit gases. These biases for SO_2 were observed previously in the 1981 data and seem to be consistent in magnitude and direction. No satisfactory explanation can be provided at this time. However, this consistent bias should be investigated and corrected, if possible.

A review of Figure 9 clearly shows the large variability of precision data for the manual methods and, in particular, the presence of many extreme values for the SO_2 and NO_2 methods. Figure 12 shows more variability of the accuracy audit results from the continuous SO_2 and NO_2 methods than for CO and O_3.

Based on the plots of Figures 9 through 12, quarterly probability limit values which exceed those listed in Table 13 should be considered excessive or outlier values and should initiate immediate investigation to determine and, hopefully, correct the cause of such excessive values.

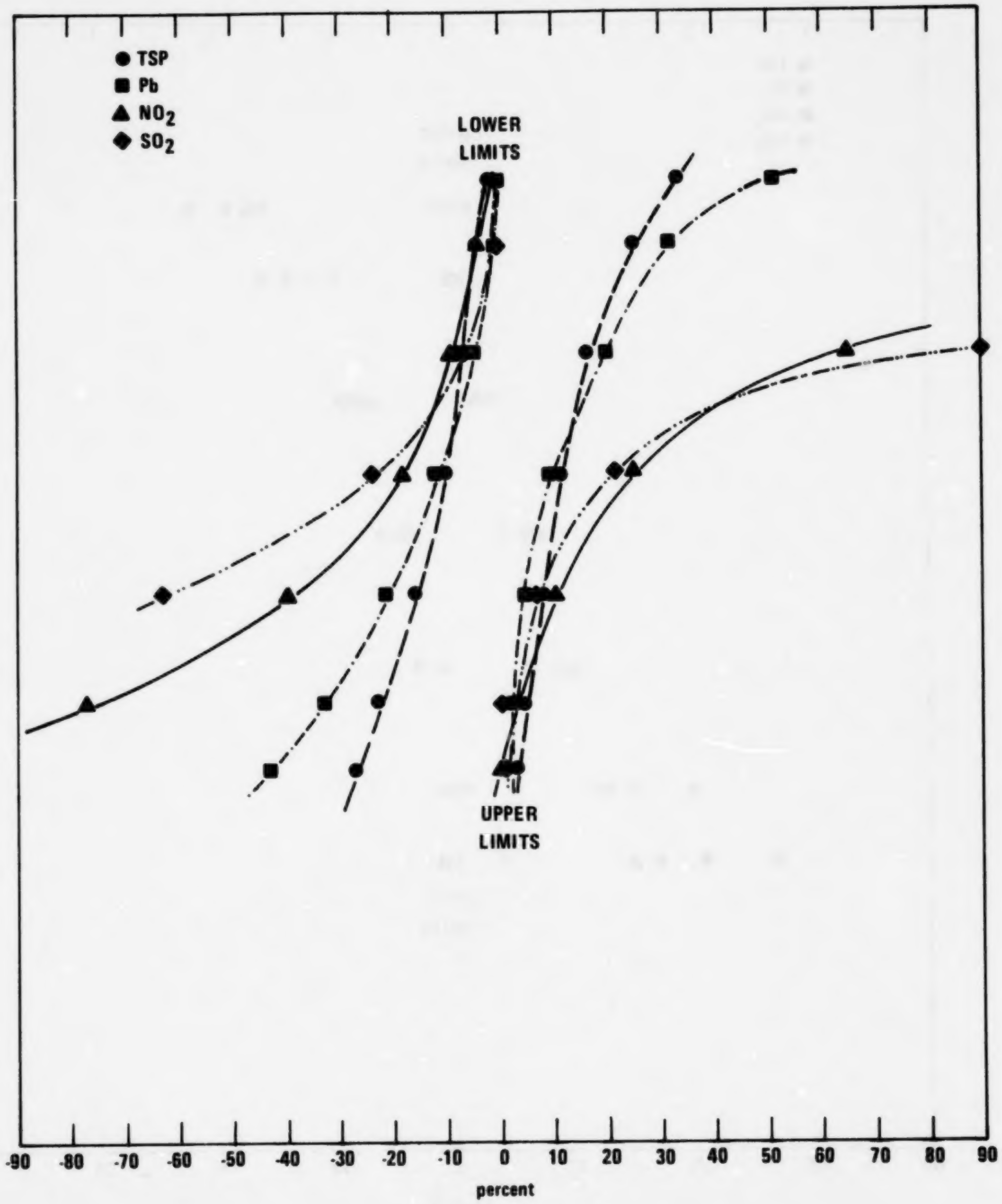

Figure 9. Cumulative frequency distributions, precision, manual methods.

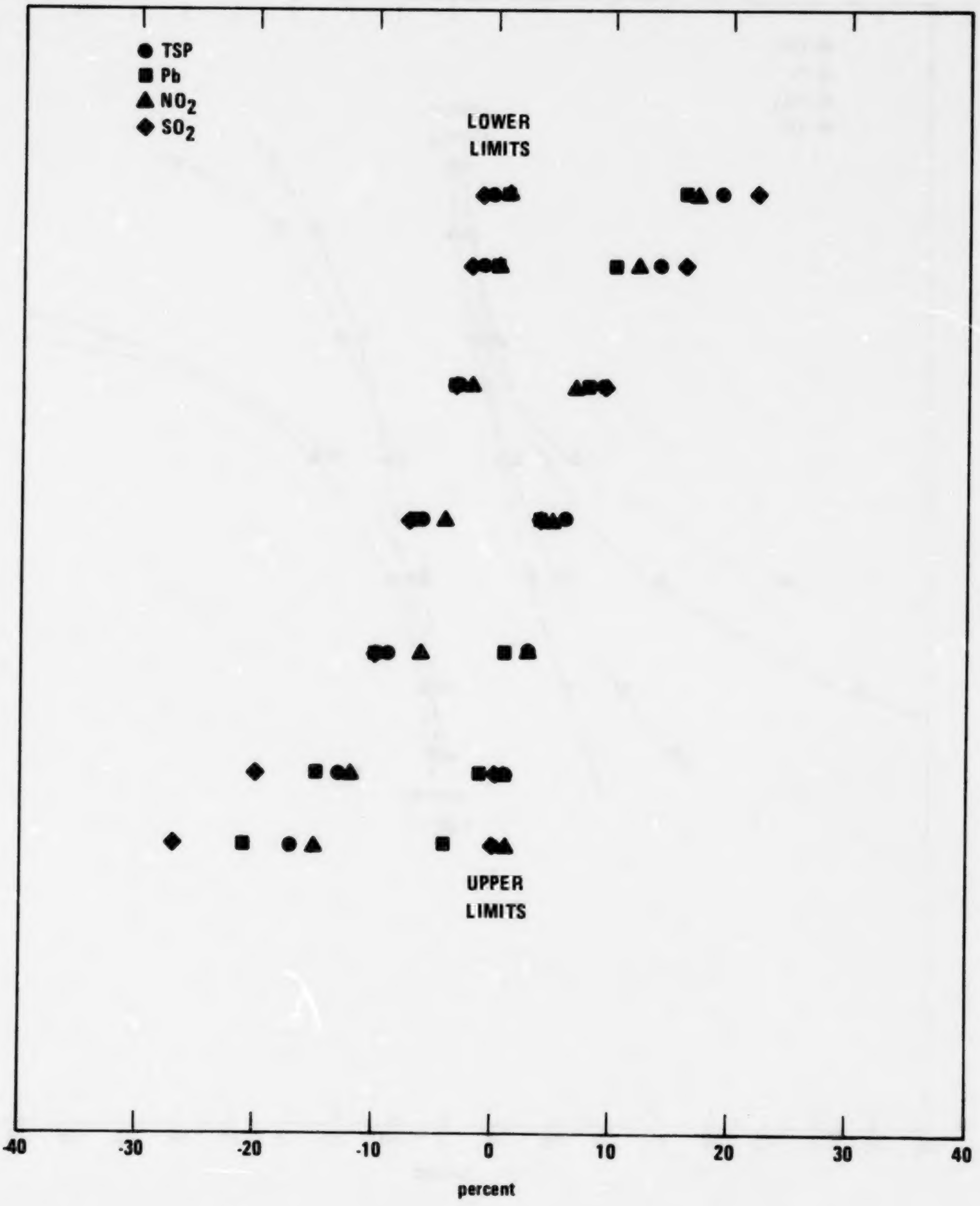

Figure 10. Cumulative frequency distributions, accuracy (level 2), manual methods.

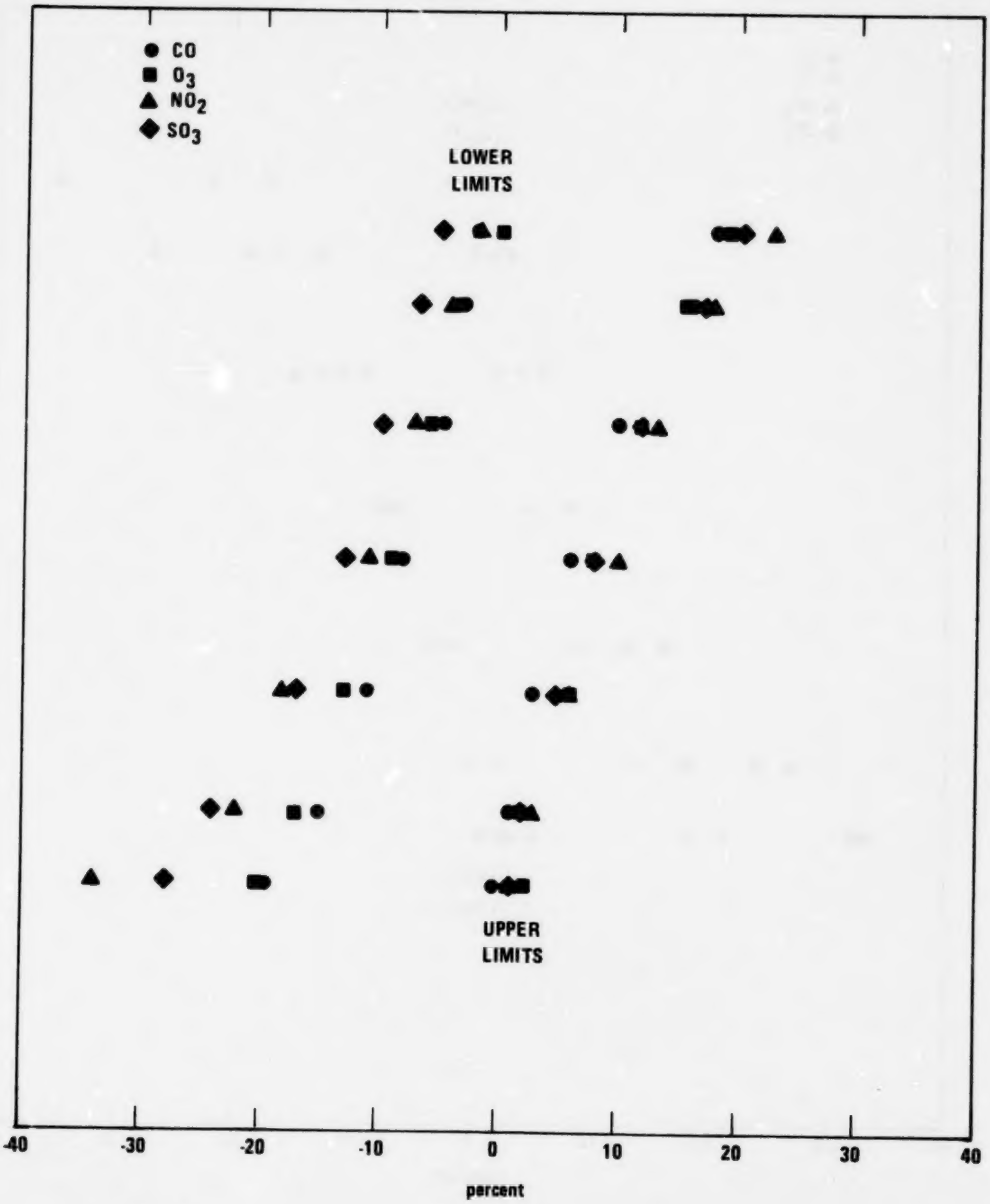

Figure 11. Cumulative frequency distributions, precision, continuous methods.

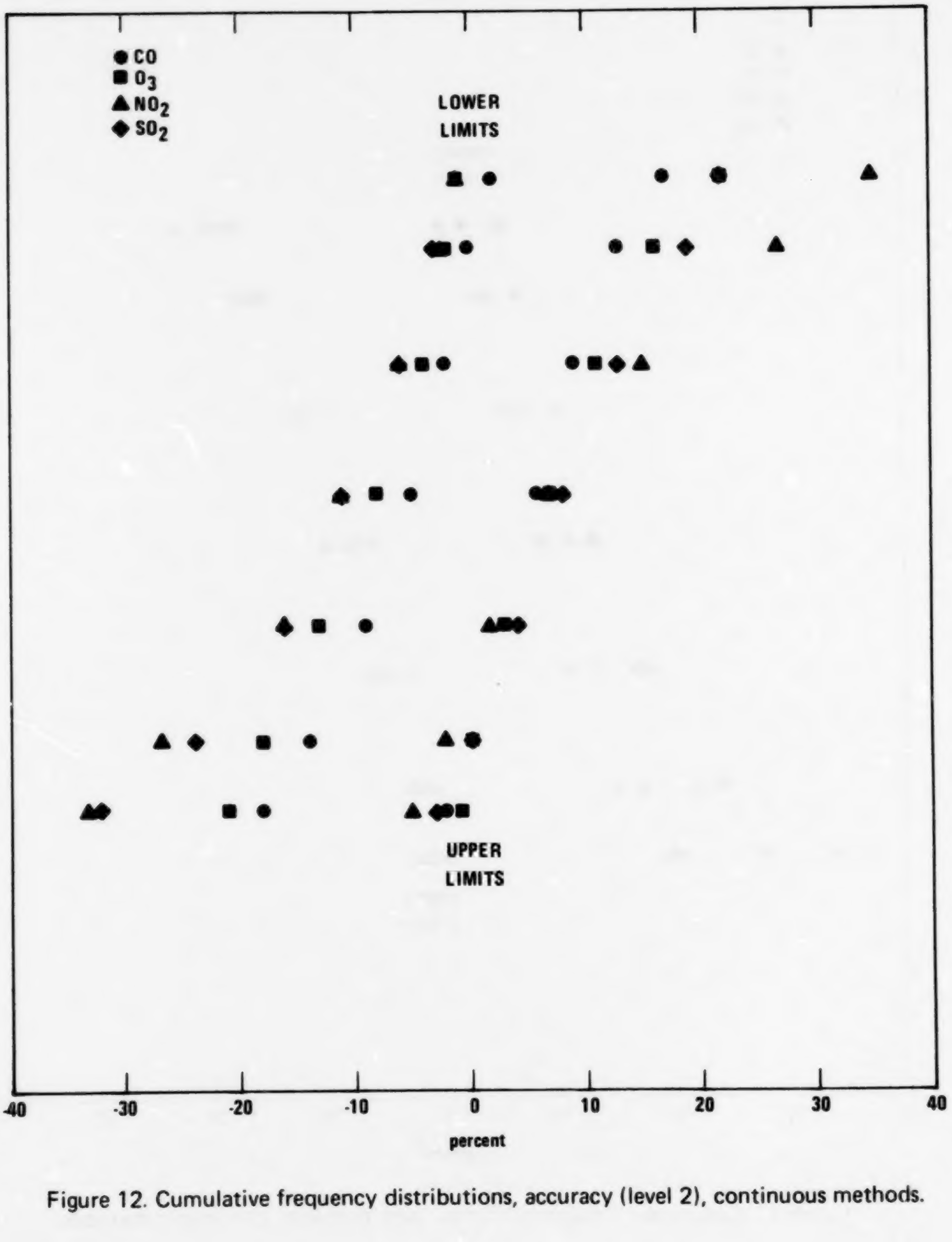

Figure 12. Cumulative frequency distributions, accuracy (level 2), continuous methods.

TABLE 13. VALUES OF QUARTERLY PROBABILITY LIMITS CONSIDERED AS EXCESSIVE

	Precision Limits	Accuracy Limits		
		Level 1	Level 2	Level 3
Manual Methods				
TSP	± 30	---	± 18	---
Pb	± 45	± 28	± 19	---
NO_2	± 60	± 22	± 16	± 15
SO_2	± 70	± 28	± 25	± 20
Continuous Methods				
CO	± 19	± 29	± 18	± 18
O_3	± 20	± 28	± 22	± 20
NO_2	± 31	± 50	± 34	± 32
SO_2	± 24	± 33	± 27	± 25

SECTION 6

COMPARISON OF RESULTS FROM THE PARS AND THE PERFORMANCE AUDIT PROGRAM

A general comparison between the accuracy data of the PARS program and the Performance Audit (PA) data is included in this report. The audit data are the results of an independent check, the National Ambient Air Audit Program, conducted by the Quality Assurance Division (QAD) of the EMSL. Blind samples are sent to laboratories that perform the State and local agencies' analyses. The samples are analyzed and results are sent to QAD where they are evaluated.

Since precision assessments are not made in the PA program, only accuracy can be compared across the PARS and the PA programs. For the purpose of this report, the results from PARS and the PA system are compared at approximately the same levels by matching laboratories and reporting organizations. Since the PARS data are presented with outliers, the same approach was taken with the audit data. Knowledge of the historical audit data reports, however, indicates that the presence of outliers may make a significant difference in the average audit results for the PA.

Comparisons of the national averages of the probability limits (Table 14) exhibit good agreement between the results of the two programs. However, there is considerable variation between the results of the two programs when comparisons are made on Regional and reporting organization bases. Lack of better agreement results from several factors. First, the inclusion of outlier values in the PA data appears to have introduced some excessive distortion of general trends. Second, even though the PARS averages in Table 14 are weighted by the number of audits, variations due to many sources of error for both data sets are averaged together to obtain the national averages, thereby masking any correlations which may have existed for the results of individual agencies. Third, the concentration levels for the two systems do not coincide exactly at each of the audit levels. Fourth, the PA data are the results of independent external audits, while the PARS accuracy data are based on the results of independent internal audits. The expected effects of the last-mentioned factor would cause the spread of the limits for the PA to be wider than that for the PARS. Examination of the results (see Table 14) confirm these expectations.

Comparisons of the PA and the PARS results by Region are shown in Figures 13a through f. The figures show considerable variation among Regions.

CO. For a given Region the width of the probability limits is nearly the same for PA and PARS, except for Region 2, where PARS is less than PA; Region 8, where PARS is less than PA; and Region 3, where PARS is greater than PA.

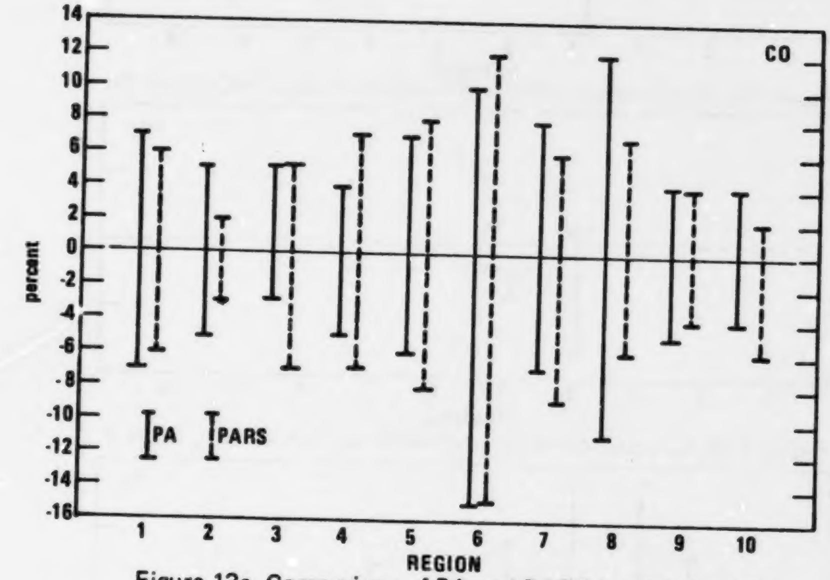

Figure 13a. Comparison of PA and PARS for CO (level 3).

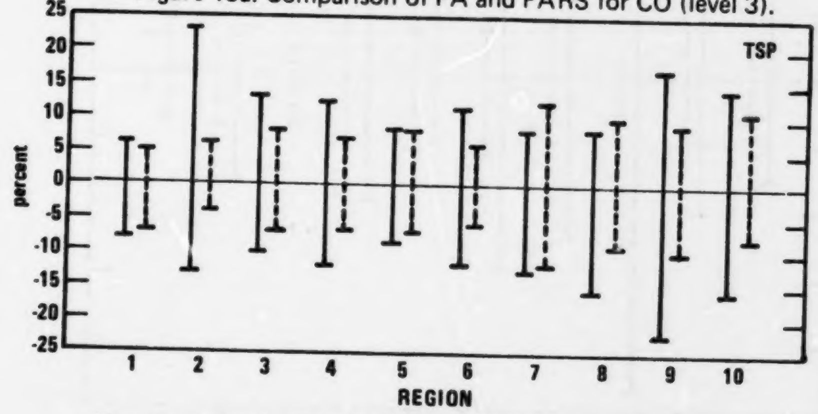

Figure 13b. Comparison of PA and PARS for TSP (level 2).

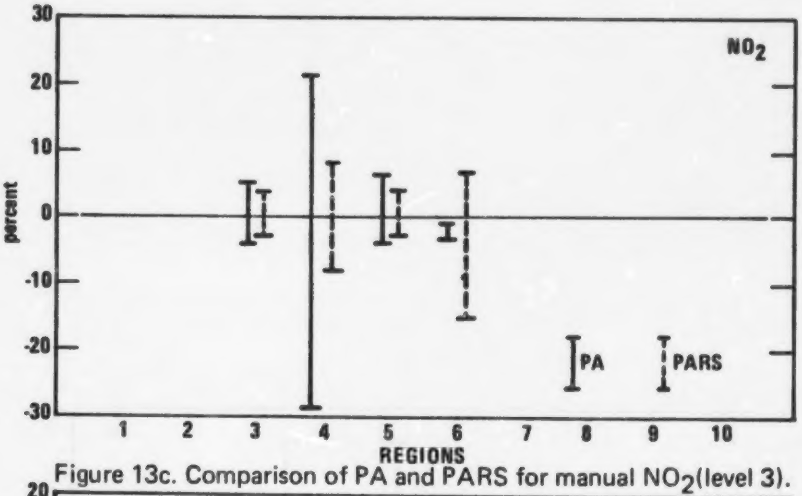

Figure 13c. Comparison of PA and PARS for manual NO_2(level 3).

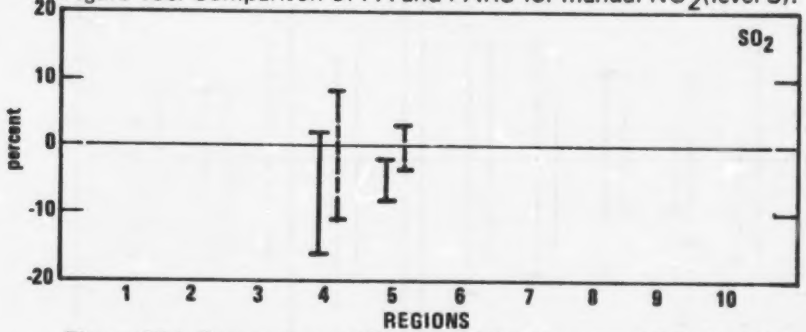

Figure 13d. Comparison of PA and PARS for manual SO_2 (level 3).

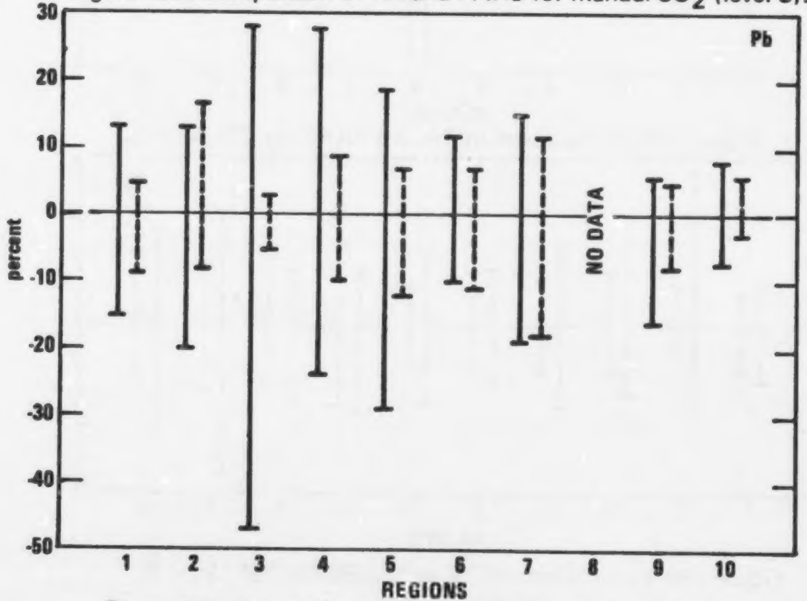

Figure 13e. Comparison of PA and PARS for Pb (level 3).

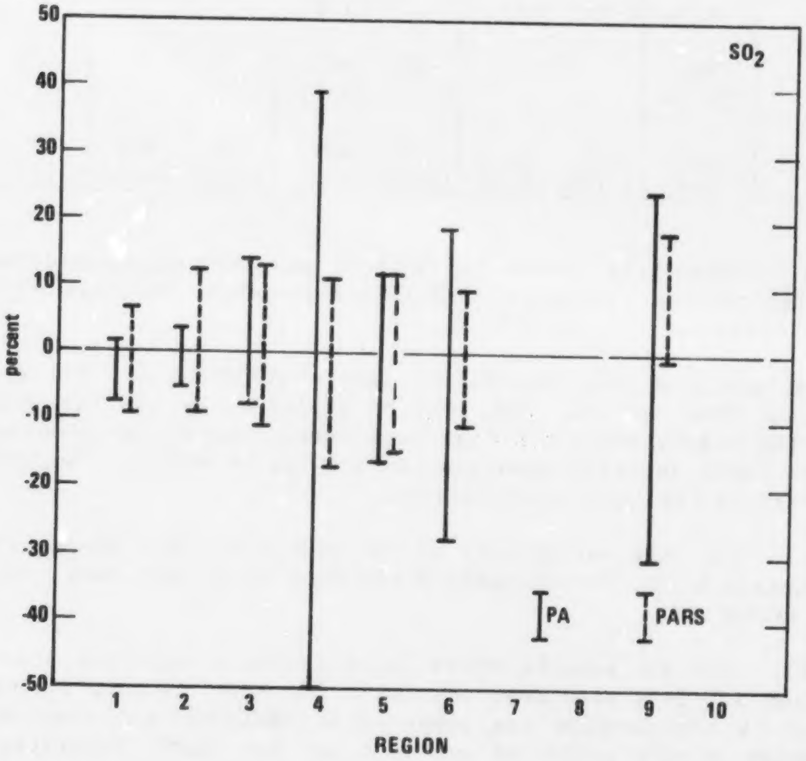

Figure 13f. Comparison of PA and PARS for continuous SO_2 (level 3).

TABLE 14. SUMMARY COMPARISON OF EMSL PERFORMANCE AUDITS (PA) vs PARS ACCURACY AUDIT DATA FOR YEAR 1982

Pollutant & Method Code	Audits	National Averages Probability Limits (%)							
		Level 1		Level 2		Level 3		Level 4	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
CO									
PA	1704	-17	+12	- 7	+ 8	- 7	+ 7		
PARS	(1122)	(-15)	(+15)	(- 7)	(+ 8)	(- 7)	(+ 7)	(- 3)	(+ 3)
NO_2									
PA	127	-24	+21	-20	+15	-25	+19	-23	+16
PARS	(526)	(-11)	(+12)	(- 8)	(+ 9)	(- 7)	(+ 7)		
SO_2									
PA	130	-32	+22	21	+20	-15	+ 2	-13	+ 9
PARS	(445)	(-18)	(+11)	(-12)	(+ 8)	(-10)	(+ 7)		
LEAD									
PA	377	-37	+35	-24	+20	-22	+14		
PARS	(529)	(-16)	(+11)	(-11)	(+ 8)				
HIV									
PA	2860			-13	+12				
PARS	(5475)			(- 7)	(+ 7)				
SO_2 (Cont)									
PA	363	-27	+21	-25	+21	-25	+21	-22	+20
PARS	(656)	(-19)	(+14)	(-17)	(+13)	(-16)	(+13)	(-16)	+12)

Region 6 probability limits for both PA and PARS are considerably wider than for other regions. Region 8's PA limits are wider than all other regions except for Region 6.

Hi Vol. The width of the probability limits for PARS is, for all Regions except 7, less than for PA. This may be explained by the fact that within each reporting organization the flow rate checks are not as completely independent from their internal standards as are the PA audits. Regions 2 and 9 have more variability than other Regions.

NO_2 (manual). The wide variability of the PA for Region 4 needs explanation. Also, for Region 6 the considerable difference in PA and PARS limits should somehow be explained.

SO_2 (manual). For PA results there is a definite negative bias for both Regions 4 and 5. This bias does not exist for PARS. A possible explanation is that for PA the samples are prepared at EMSL/RTP and some degradation of the samples occurs prior to analysis is the SLAMS laboratories. For PARS the standards are prepared locally and analyzed soon after preparation.

Pb. There is considerable variation in the results from Region to Region. However, for all Regions, the PARS variability is considerably less than for PA. This may be explained by the fact that the local independently-prepared standards for PARS have close traceability to the materials used for calibration, whereas the standards for PA, since they are prepared at EMSL/RTP, are more completely independent. There appears to be no significant bias in either the PA or the PARS results.

Regions 3, 4, and 5 PA results have much more variability than for other regions.

$\underline{SO_2}$ (Continuous) - Regions 4 and 6 show considerably more variation of PA results than other Regions. Region 4 PA results are wider due to the results from laboratories in two particular reporting organizations in the Region. The PARS data show nearly the same variability across Regions except for Region 1 which has less variability.

All Regions, except 2 and 3, show a slight negative bias for both PA and PARS data, similar to the negative biases for the manual SO_2 method.

SECTION 7

CONCLUSIONS AND RECOMMENDATIONS

The results of PARS data for 1982 indicate some general improvement over the data for 1981. However, considerable differences exist among Regions and individual reporting organizations for most measurement methods. Investigations should be made to determine the causes of these significant differences.

Comparison of PARS and PA data show more variability of the PA data than for PARS. These differences are presumably due to the fact that the external PA accuracy audits are more completely independent than the internal PARS accuracy audits.

Further improvement in the data quality assessments, which are measures of the monitoring data quality, can be achieved only through continuing efforts of State and local agency personnel involved (first-hand) with the operation and quality control of their measurement systems. Regional QA Coordinators can also assist through their review of the operations and quality control practices across the States in their Regions.

Each Regional QA Coordinator should evaluate the PARS data from all the reporting organizations within his Region to identify those organizations having excessively large variations of probability limits. Investigation should be made to determine the causes and correct them to preclude future excessive deviations. Similarly, Regional QA Coordinators should review the operations of the reporting organizations having significantly better precision and accuracy results in order to identify specific procedures which should be uniformly used throughout the Region and the Nation to further improve the reliability of the monitoring data in the National Aerometric Data Base.

REFERENCES

1. Code of Federal Regulations, Title 40, Part 58, "Ambient Air Quality and Surveillance."

2. Lampe, R.L., B.F. Parr, B.I. Bennett, G. Pratt, and W.J. Mitchell. "National Performance Audit Program: Ambient Air Audits of Analytical Proficiency-1982." U.S. Environmental Protection Agency Report, EPA 600/4-84-005. Research Triangle Park, NC 27711. January 1984.

3. Rhodes, R.C., B.I. Bennett, and J.C. Puzak. "EPA's National Performance Audit Program for Ambient Air Pollution Measurements." In Proceedings of the 75th Annual Meeting of the Air Pollution Control Association, New Orleans, LA, June 1982. Presentation 82-23.

APPENDIX A

GLOSSARY

Reporting Organization -- a state, or subordinate organization within the state that is responsible for a set of SLAMS stations, monitoring for the same pollutant and for which PARS data can be logically pooled (statistically combined). It is important to emphasize that a reporting organization is pollutant- and site-specific and is responsible for the sampling, calibration, analysis, data quality assessment, and reporting of the monitoring data for the specific pollutant. It is possible that a particular SLAMS station may belong to two different reporting organizations, but the likelihood of this occurring is small.

Precision (Continuous Analyzers) -- a measure of repeatability obtained from actual concentration in a gas cylinder and the values indicated by the analyzer. For SO_2, NO_2, and O_3 analyzers the gas concentration used for the precision check must be between 0.08 and 0.10 ppm and for CO it must be between 8 and 10 ppm. The data from all biweekly analyzer checks for a given pollutant are combined and 95% probability limit values reported to EPA each quarter by each reporting organization. For this report, the quarterly values for 1982 were averaged and overall 95% probability limits were calculated for each reporting organization, for each Regional Office, and for the entire SLAMS network.

Precision (Manual Methods) -- a measure of repeatability for TSP, NO_2, and SO_2 manual methods (bubblers) determined by operating collocated samplers at selected sites. At each collocated site one sampler is designated as the "actual" sampler and the other as the "check" sampler, and the difference between the two samplers provides the precision estimate. For Pb, precision estimates are obtained by analyzing duplicate strips from a high volume filter sample collected at a site where high Pb concentrations exist. These precision checks are made weekly and reported quarterly. The data from the manual methods were calculated in a similar manner as the automated (continuous) analyzers for this report.

Accuracy (Continuous Analyzers) -- the agreement between an analyzer result and a known audit concentration. Accuracy estimates are obtained once per year for each analyzer by introducing blind audit materials into the analyzer. The audit samples must span at least three concentration levels and, whenever possible, must be traceable to NBS or other authoritative reference. At least 25% of the analyzers in each reporting organization must be checked each quarter. The percentage difference for each audit concentration is determined and the average for all analyzers checked within that quarter is calculated for each level. The standard deviation for each level is then used to calculate the 95% probability limits for the reporting organization which in turn are submitted quarterly to EPA. These quarterly averages were used to compile the annual averages presented here. They were calculated in the same manner as described earlier for precision.

Accuracy (Manual Methods) -- the agreement between an observed value and a known or reference value. For NO_2 and SO_2 manual methods, the accuracy of the analytical portion of the method is assessed at three levels by the analysis of known audit materials. For Pb, the accuracy of the analytical portion of the method is assessed at two levels. For TSP, the flow rate (or air volume) portion of the method is assessed at the nominal flow rate.

Completeness -- the number of the precision and accuracy checks reported as compared to the number that should have been reported if all checks had been done. This value, expressed as a percentage, is not corrected for instances where equipment failure prevented conducting the check, or for periods when monitoring data were invalidated. Thus, it may not necessarily reflect the overall capabilities or total effort of a reporting organization.

National Ambient Air Audit Program (NAAAP) -- an external performance audit program conducted by EPA on state and local agency organizatons. Organizations operating SLAMS stations are required to participate in this program directed by the Environmental Monitoring Systems Laboratory (EMSL) of the EPA at Research Triangle Park, NC. In this program, blind audit materials prepared by EMSL are sent to participating laboratories. The laboratories analyze the samples and return the results to EMSL. Shortly after the audit is completed each participant receives a report that compares his performance to that of all other participants. The use of audit materials for the manual SO_2 audits (freeze-dried $SO_3^=$), manual NO_2 audits ($NaNO_2$ solution), and particulate $SO_4^=$, NO_3^-, and Pb audits (spiked filter strips) evaluates only the analytical proficiency of the laboratory. The reference flow device used in the TSP sampler audit evaluates only the accuracy of the flow calibration. However, the CO and SO_2 continuous analyzer audits evaluate the entire measurement system. As explained above, the external NAAAP audits are conducted in essentially the same manner as the internal audits (accuracy checks) for the PARS program. The audits for the manual methods and CO analyzer are conducted semiannually and those for flow (TSP) and continuous SO_2 monitors are conducted once per year.

APPENDIX B

TABLE B1. TSP PRECISION AND ACCURACY ANNUAL AVERAGES FOR REPORTING ORGANIZATIONS

	Required Sites		Precision			Accuracy						
Reporting Organization	No. SLAMS*	No. NAMS	No. Data Pairs	Prob. Limits Low	Up	No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
07001	019	025	157	-08	+09	148			-08	+03		
**CT	019	025	157	-08	+09	148			-08	+03		
20001	009	001	106	-13	+13	32			-04	+09		
**ME	009	001	106	-13	+13	32			-04	+09		
22001	008	017	105	-09	+14	40			-09	+10		
**MA	008	017	105	-09	+14	40			-09	+10		
30001	016	001	112	-12	+08	32			-08	+07		
**NH	016	001	112	-12	+08	32			-08	+07		
41001	005	006	135	-07	+11	17			-05	+04		
**RI	005	006	135	-07	+11	17			-05	+04		
47001	005	001	99	-05	+08	28			-06	+04		
**VT	005	001	99	-05	+08	28			-06	+04		
31001	023	009	109	-07	+07	12			-01	+01		
**NJ	023	009	109	-07	+07	12			-01	+01		
33001	099	027	242	-16	+10	38			-02	+05		
**NY	099	027	242	-16	+10	38			-02	+05		
40001	005	007	34	-06	+03	36			-06	+05		
**PR	005	007	34	-06	+03	36			-06	+05		
08001	006	003	107	-15	+15	15			-13	+14		
**DE	006	003	107	-15	+15	15			-13	+14		
09001	005	004	113	-05	+12	10			-09	+07		
**DC	005	004	113	-05	+12	10			-09	+07		
21001	014	006	88	-10	+09	46			-09	+08		
21002	005	000	109	-08	+09	12			-05	+01		
21003	002	001	101	-04	+04	13			-10	+13		
21005	004	001	117	-06	+12	11			-11	+11		
21006	002	001	106	-06	+05	12			-07	+07		
**MD	027	009	521	-07	+08	94			-08	+08		
39001	061	033	122	-15	+18	121			-09	+12		
39002	011	007	139	-10	+09	212			-04	+05		
39003	012	004	115	-19	+16	12			-12	+08		
**PA	084	044	376	-15	+15	345			-08	+08		

*SLAMS - State and Local Air Monitoring Sites, not including National Air Monitoring Sites (NAMS). Actually, NAMS are a subset of SLAMS. For example, for Reporting Organization 07001, there is a total of 44 SLAMS, of which 25 are NAMS.

**Two-letter state abbreviations.

TABLE B1. (cont.)

Reporting Organization	Required Sites No. SLAMS	No. NAMS	Precision No. Data Pairs	Prob. Limits Low	Up	Accuracy No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
48001	032	017	157	-07	+10	51			-05	+04		
48002	001	001	106	-08	+08	9			-02	+11		
48003	016	000	157	-08	+07	23			-07	+04		
48005	000	002	111	-09	+09	9			-01	+00		
**VA	049	020	531	-08	+08	92			-04	+05		
50001	012	007	43	-03	+15	12			-10	+04		
50002	007	004	94	-22	+06	10			-04	+07		
**WV	019	011	137	-12	+10	22			-07	+06		
01011	026	006	200	-28	+04	40			-04	+09		
01012	008	006	99	-18	+22	298			-04	+04		
01013	004	003	86	-12	+10	8			-07	+04		
01014	006	002	145	-10	+08	8			-04	+07		
01015	009	000	110	-07	+09	112			-10	+17		
01016	000	000	16	-35	+28	0						
**AL	053	017	656	-16	+11	366			-06	+08		
10001	013	000	114	-10	+10	38			-07	+04		
10002	005	000	98	-18	+13	5			-03	+02		
10003	006	001	92	-10	+03	15			-09	+04		
10004	008	000	113	-18	+08	10			-05	+03		
10005	000	000	100	-16	+16	17			-12	+11		
10006	004	000	117	-09	+08	12			-03	+08		
10007	000	000	117	-15	+16	4			-04	+03		
10011	007	004	130	-13	+12	80			-10	+10		
10012	015	002	113	-10	+10	22			-10	+14		
10013	005	002	114	-26	+17	29			-03	+02		
10014	002	000	108	-08	+10	14			-14	+18		
10015	002	000	91	-13	+16	7			-21	+13		
10016	009	000	110	-11	+08	14			-03	+04		
10017	008	002	96	-09	+09	13			-04	+07		
10018	010	003	114	-09	+11	90			-06	+07		
**FL	093	014	1,627	-13	+11	370			-07	+07		
11010	040	011	229	-16	+11	52			-06	+05		
**GA	040	011	229	-16	+11	52			-06	+05		
18001	040	006	425	-20	+17	85			-14	+18		
18002	008	006	50	-08	+08	21			-03	+05		
18003	000	000	14	-37	+58	0						
**KY	048	012	489	-17	+17	106			-08	+11		
25100	014	004	148	-17	+13	27			-10	+11		
**MS	014	004	148	-17	+13	27			-10	+11		

TABLE B1. (cont.)

	Required Sites		Precision			Accuracy						
Reporting Organization	No. SLAMS	No. NAMS	No. Data Pairs	Prob. Limits Low	Up	No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
36009	022	005	312	-19	+17	39			-05	+07		
36010	011	007	98	-10	+11	29			-08	+11		
36012	012	001	103	-10	+14	17			-09	+06		
36013	019	001	120	-10	+08	20			-06	+05		
26014	016	002	117	-20	+08	19			-06	+03		
36015	009	004	53	-15	+14	18			+03	+14		
36016	010	005	118	-17	+10	24			-04	+03		
**OH	203	051	1,800	-14	+12	321			-06	+06		
51001	066	016	120	-10	+10	16			-04	+07		
**WI	066	016	120	-10	+10	16			-04	+07		
04002	023	003	177	-22	+28	105			-07	+06		
**AR	023	003	177	-22	+28	105			-07	+06		
19001	028	007	106	-11	+16	144			-06	+04		
**LA	028	007	106	-11	+16	144			-06	+04		
32001	041	000	212	-18	+12	257			-05	+06		
32002	007	004	122	-13	+10	23			-07	+07		
**NM	048	004	334	-16	+11	280			-06	+06		
37101	018	002	85	-16	+34	20			-06	+08		
37102	006	003	111	-16	+08	12			-04	+03		
37103	005	003	89	-08	+10	27			-06	+11		
**OK	029	008	285	-14	+18	59			-05	+07		
45001	014	030	182	-15	+18	502			-08	+06		
45002	002	004	114	-26	+15	52			-09	+07		
45003	005	002	111	-13	+17	72			-06	+06		
45004	004	002	109	-10	+24	33			-14	+21		
45005	004	000	90	-15	+05	33			-07	+05		
45006	006	004	7	-25	+35	62			-08	+13		
45007	002	002	119	-02	+03	39			-03	+02		
**TX	037	044	732	-14	+15	793			-08	+08		
16001	006	003	60	-47	+54	16			-29	+14		
16002	002	003	0	-09	+11	15			-03	+06		
16003	030	008	114	-10	+16	48			-04	+04		
**IA	038	014	174	-17	+22	79			-13	+08		
17001	012	008	104	-17	+24	33			-12	+12		
**KS	012	008	104	-17	+24	33			-12	+12		
26001	014	003	0	-15	+18	20			-06	+05		
26002	006	003	0	-36	+47	10			-06	+05		
26003	005	003	0	-20	+16	15			-17	+11		
26004	004	003	0	-11	+13	6			-02	+07		
26005	006	002	0	-06	+03	12			-04	+02		

TABLE B1. (cont.)

Reporting Organization	Required Sites No. SLAMS	No. NAMS	Precision No. Data Pairs	Prob. Limits Low	Up	Accuracy No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
34001	057	004	408	-13	+14	256			-05	+04		
34002	007	002	79	-12	+11	19			-19	+26		
34003	006	002	90	-09	+07	59			-04	+09		
34004	005	001	76	-11	+31	10			-02	+16		
**NC	075	009	653	-11	+15	344			-08	+14		
42001	010	008	293	-09	+11	355			-03	+03		
**SC	010	008	293	-09	+11	355			-03	+03		
44001	022	003	171	-08	+06	189			-09	+14		
44002	005	007	105	-17	+20	55			-08	+08		
44003	008	005	113	-05	+09	90			-05	+09		
44004	007	002	96	-07	+09	44			-06	+05		
44005	007	004	122	-06	+06	100			-06	+06		
44006	000	000	0			35			-09	+13		
**TN	049	021	607	-09	+10	513			-07	+09		
14001	045	022	162	-23	+25	57			-12	+09		
14002	008	004	194	-09	+25	20			-10	+05		
14003	011	001	74	-19	+10	30			-09	+10		
**IL	064	027	430	-16	+20	107			-10	+08		
15001	037	010	104	-07	+12	38			-03	+06		
15002	002	003	110	-03	+10	2			-02	+04		
15003	007	003	51	-06	+09	32			-05	+08		
15004	000	000	41	-05	+22	4			-02	+03		
15005	009	001	112	-11	+15	14			+03	+07		
15006	000	000	22	-13	+11	0						
15007	000	000	0			0			-10	+00		
15008	000	000	110	-08	+06	16			-01	+02		
15009	000	000	108	-07	+07	8			-03	+03		
15010	009	000	47	-06	+14	8			-06	+02		
**IN	064	017	705	-07	+11	122			-03	+04		
23001	070	016	211	-08	+15	35			-03	+08		
23002	014	005	95	-10	+12	24			-04	+05		
**MI	084	021	306	-09	+13	59			-04	+07		
24001	049	011	132	-13	+08	70			-10	+13		
**MN	049	011	132	-13	+08	70			-10	+13		
36001	010	005	108	-06	+09	17			-07	+06		
36002	008	003	87	-13	+14	12			-08	+03		
36003	016	002	171	-19	+24	23			-09	+03		
36004	018	000	88	-29	+11	17			-08	+15		
36005	005	000	102	-13	+23	10			-11	+04		
36006	009	004	101	-11	+03	17			-04	+08		
36007	007	005	108	-10	+09	19			-03	+06		
36008	031	007	114	-04	+13	40			-05	+04		

TABLE B1. (cont.)

	Required Sites		Precision			Accuracy						
Reporting Organization	No. SLAMS	No. NAMS	No. Data Pairs	Prob. Limits Low	Up	No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
**MO	035	014	0	-17	+20	63			-07	+06		
28001	019	000	148	-15	+29	20			-11	+14		
28002	004	003	81	-11	+13	11			-11	+10		
28003	009	003	106	-10	+09	20			-09	+05		
*NB	032	006	335	-12	+17	51			-10	+09		
06001	048	013	152	-30	+32	48			-08	+06		
**CO	048	013	152	-30	+32	48			-08	+06		
27001	022	001	118	-16	+22	44			-06	+05		
27002	004	000	52	-08	+10	8			-03	+07		
27003	003	001	46	-15	+19	4			-04	+08		
27004	005	000	125	-20	+23	15			-17	+21		
**MT	034	002	341	-15	+18	71			-08	+10		
35001	020	001	100	-11	+08	23			-09	+06		
**ND	020	001	100	-11	+08	23			-09	+06		
43001	021	002	97	-09	+07	77			-04	+04		
**SD	021	002	97	-09	+07	77			-04	+04		
46001	007	008	97	-10	+12	28			-05	+05		
**UT	007	008	97	-10	+12	28			-05	+05		
52001	012	001	148	-12	+10	13			-03	+06		
**WY	012	001	148	-12	+10	13			-03	+06		
03100	025	000	75	-11	+27	14			-15	+09		
03200	003	005	82	-07	+20	32			-11	+10		
03300	007	004	0	-08	+18	16			-10	+15		
**AZ	035	009	157	-08	+21	62			-11	+12		
05001	032	025	529	-27	+29	71			-12	+10		
05004	009	009	115	-11	+08	56			-07	+04		
05036	004	003	112	-12	+12	7			-17	+07		
05061	013	009	193	-11	+14	30			-14	+10		
**CA	058	046	949	-15	+16	164			-11	+08		
12120	010	002	95	-17	+09	50			-07	+06		
**HI	010	002	95	-17	+09	50			-07	+06		
29200	010	002	101	-08	+07	63			-05	+06		
29300	008	003	15	-06	-01	5			+02	+10		
**NV	018	005	116	-07	+03	68			-03	+07		
02020	011	003	13	09	+10	1						
**AK	011	003	13	09	+10	1						

Table Bl. (cont.)

Reporting Organization	Required Sites No. SLAMS	No. NAMS	Precision No. Data Pairs	Prob. Limits Low	Up	Accuracy No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
13001	015	002	80	-08	+07	33			-04	+03		
13002	015	002	82	-08	+06	26			-06	+02		
**ID	030	004	162	-08	+06	59			-05	+02		
38001	028	009	331	-13	+13	372			-05	+06		
**OR	028	009	331	-13	+13	372			-05	+06		
49001	019	013	149	-13	+09	29			-03	+05		
**WA	019	013	149	-13	+09	29			-03	+05		

TABLE B2. MANUAL SO_2 PRECISION AND ACCURACY ANNUAL AVERAGES FOR REPORTING ORGANIZATIONS

	Required Sites		Precision			Accuracy						
Reporting	No.	No.	No. Data	Prob. Limits		No.	Level 1		Level 2		Level 3	
Organization	SLAMS	NAMS	Pairs	Low	Up	Audits	Low	Up	Low	Up	Low	Up
10001	000	000	15	-25	+30	12	-10	+07	-07	+04	-07	+04
10002	000	000	5	-99	+99	3	-03	+03	-01	+01	-02	+00
10003	000	000	0			4	-02	+04	-03	+06	-03	+06
10004	000	000	74	-27	+35	12	-12	+07	-10	+10	-06	+06
10005	000	000	0			8	-06	+09	-11	+09	-13	+10
10006	000	000	7	-24	+36	11	-19	+15	-25	+16	-15	+06
10012	000	000	3	-08	+04	28	-10	+06	-06	+04	-05	+02
10013	000	000	14	-20	+16	10	-07	+19	-05	+11	-06	+16
10014	000	000	2	-73	+99	35	-23	+11	-11	+05	-08	+05
10017	000	000	10	-17	+27	43	-28	+03	-17	+01	-15	+02
**FL	000	000	130	-30	+37	166	-13	+09	-10	+07	-08	+06
18002	000	000	53	-90	+99	58	-10	+12	-03	+05	-02	+04
**KY	000	000	53	-90	+99	58	-10	+12	-03	+05	-02	+04
34001	000	000	121	-14	+14	20	-11	+06	-12	+00	-14	+02
34002	000	000	184	-41	+52	36	-30	+18	-21	+12	-18	+12
34003	000	000	81	-92	+77	58	-16	+03	-09	+05	-07	+06
34004	000	000	17	-10	+08	6	-17	+05	-18	+23	-12	+16
**NC	000	000	403	-46	+43	120	-19	+08	-14	+09	-12	+08
36009	000	000	0			46	-11	+04	-06	+04	-05	+04
36012	000	000	0			59	-08	+06	-05	+04	-04	+03
**OH	000	000	0			105	-09	+05	-05	+04	-05	+04
32001	000	000	86	-02	+02	41	-09	+14	-04	+07	-06	+05
**NM	000	000	86	-02	+02	41	-09	+14	-04	+07	-06	+05
12120	000	000	34	-29	+42	61	-08	+01	-04	+01	-03	+01
**HI	000	000	34	-29	+42	61	-08	+01	-04	+01	-03	+01

TABLE B3. MANUAL NO_2 PRECISION AND ACCURACY ANNUAL AVERAGES FOR REPORTING ORGANIZATIONS

Reporting Organization	Required Sites No. SLAMS	Required Sites No. NAMS	Precision No. Data Pairs	Precision Prob. Limits Low	Precision Prob. Limits Up	Accuracy No. Audits	Level 1 Low.	Level 1 Up	Level 2 Low.	Level 2 Up	Level 3 Low.	Level 3 Up
48003	000	000	96	-11	+14	28	-06	+05	-04	+05	-04	+05
**VA	000	000	96	-11	+14	28	-06	+05	-04	+05	-04	+05
10001	000	000	80	-24	+27	12	-02	+04	-01	+04	-02	+05
10004	000	000	56	-21	+50	11	-02	+12	-01	+09	-01	+08
10005	000	000	5	-09	+13	8	-05	+10	-08	+07	-04	+06
10006	000	000	23	-15	+30	11	+00	+03	-03	+04	-04	+04
10012	000	000	12	-04	+06	25	-03	+04	-03	+05	-03	+04
10017	000	000	83	-06	+09	58	-07	+10	-05	+06	-05	+05
**FL	000	000	259	-15	+24	125	-03	+07	-03	+06	-03	+05
18002	000	000	58	-78	+78	56	-26	+23	-14	+14	-11	+05
**KY	000	000	58	-78	+78	56	-26	+23	-14	+14	-11	+05
34001	000	000	128	-22	+25	17	-07	+03	-06	+02	-05	+00
34002	000	000	238	-54	+66	50	-13	+12	-12	+10	-12	+11
34003	000	000	88	-13	+10	57	-06	+10	-01	+06	-01	+06
34004	000	000	42	-78	+83	12	-08	+12	-12	+08	-16	+14
**NC	000	000	496	-43	+47	136	-08	+09	-08	+07	-09	+08
44003	000	000	25	-08	+13	29	-07	+08	-05	+03	-04	+-5
**TN	000	000	25	-08	+13	29	-07	+08	-05	+03	-04	+-5
36009	000	000	0			44	-03	+06	-04	+05	-04	+06
36012	000	000	0			59	-08	+04	-04	+03	-03	+05
**OH	000	000	0			103	-05	+05	-04	+04	-04	+05
19001	000	000	105	-27	+17	11	-06	+03	-03	+01	-01	-01
**LA	000	000	105	-27	+17	11	-06	+03	-03	+01	-01	-01
32001	000	000	85	+00	+00	46	-06	+09	-02	+04	-02	+02
**NM	000	000	85	+00	+00	46	-06	+09	-02	+04	-02	+02
45005	000	000	44	-47	+84	49	-04	+08	-08	+09	-13	+05
**TX	000	000	44	-47	+84	49	-04	+08	-08	+09	-13	+05

TABLE B4. Pb PRECISION AND ACCURACY ANNUAL AVERAGES FOR REPORTING ORGANIZATIONS

Reporting Organization	Required Sites No. SLAMS	No. NAMS	Precision No. Data Pairs	Prob. Limits Low	Up	No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
07001	000	000	0			31	_	_	-07	+05		
**CT	000	000	0			31	_	_	-07	+05		
22001	000	000	9	-05	+10	7	_	_	-16	+08		
**MA	000	000	9	-05	+10	7	_	_	-16	+08		
41001	000	000	42	-07	+08	23	-10	+04	-09	+00		
**RI	000	000	42	-07	+08	23	-10	+04	-09	+00		
33001	000	000	24	-04	+06	4	-31	+33	-09	+18		
**NY	000	000	24	-04	+06	4	-31	+33	-09	+18		
40001	000	000	16	+00	+00	0						
**PR	000	000	16	+00	+00	0						
08001	000	000	48	-09	+15	7	-08	+07	-04	+02		
**DE	000	000	48	-09	+15	7	-08	+07	-04	+02		
09001	000	000	30	-08	+08	7	-07	-03	-07	-02		
**DC	000	000	30	-08	+08	7	-07	-03	-07	-02		
48001	000	000	26	-13	+09	6	-05	+02	-10	+04		
48003	000	000	74	-15	+19	16	-07	+04	-03	+03		
**VA	000	000	100	-14	+15	22	-06	+04	-05	+03		
01012	000	000	67	-07	+08	11	-08	+06	-03	+03		
**AL	000	000	67	-07	+08	11	-08	+06	-03	+03		
10011	000	000	20	-08	+12	9	-02	+18	-03	+07		
10012	000	000	58	-22	+15	14	-04	+04	-04	+01		
10013	000	000	34	-04	+09	9	-01	+07	-04	+07		
10017	000	000	6	-08	+00	3	-16	+17	-15	+13		
10018	000	000	102	-22	+32	8	-03	+03	-06	+01		
**FL	000	000	220	-15	+17	43	-04	+08	-05	+05		
18001	000	000	6	-55	+31	6	-02	+26	+02	+08		
18002	000	000	2	+00	+00	3			-01	+11		
**KY	000	000	8	-37	+21	9	-02	+26	+01	+09		
34001	000	000	49	-12	+31	5	-04	+09	-01	+01		
**NC	000	000	49	-12	+31	5	-04	+09	-01	+01		
42001	000	000	41	-18	+21	18	-01	+12	-10	+11		
**SC	000	000	41	-18	+21	18	-01	+12	-10	+11		
44001	000	000	7	-16	+32	0	-11	+10	-03	+04		
44002	000	000	29	-29	+20	7	-04	+08	-14	+07		
44003	000	000	82	-07	+07	60	-06	+04	-05	+02		
**TN	000	000	118	-16	+17	67	-06	+07	-07	+04		

TABLE B4. (Cont.)

Reporting Organization	Required Sites No. SLAMS	No. NAMS	Precision No. Data Pairs	Prob. Limits Low	Up	No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
14001	000	000	15	-03	+16	3	-03	+06	-01	+04		
14002	000	000	27	-10	+14	3	-05	+04	-01	+07		
**IL	000	000	42	-08	+15	6	-04	+05	-06	+06		
23001	000	000	20	-16	+15	14	-09	+01	-10	+01		
23002	000	000	47	-05	+05	4	-03	+04	-03	+04		
**MI	000	000	67	-07	+07	67	-06	+03	-07	+03		
24001	000	000	1	-05	-05	8	-06	-04	-04	-03		
**MN	000	000	1	-05	-05	8	-06	-04	-04	-03		
36001	000	000	16	+00	+02	22	-19	+15	-10	+07		
36006	000	000	16	+00	+02	17	-18	-14	-09	+07		
36008	000	000	16	+00	+02	22	-19	+15	-10	+07		
36009	000	000	16	+00	+02	22	-19	+15	-10	+07		
36010	000	000	16	+00	+02	22	-19	+15	-10	+07		
**OH	000	000	80	+00	+02	105	-19	+15	-09	+07		
51001	000	000	44	-13	+11	27	-09	+03	-07	+01		
**WI	000	000	44	-13	+11	27	-09	+03	-07	+01		
32001	000	000	56	-13	+15	34	-15	+04	-11	+08		
32002	000	000	35	-20	+13	0						
**NM	000	000	91	-16	+14	34	-15	+04	-11	+08		
37101	000	000	35	-45	+38	3						
37102	000	000	25	-08	+17	6	+02	+07	-14	+00		
37103	000	000	26	-21	+17	23	-03	+01	-01	+01		
**OK	000	000	86	-29	+26	32	-01	+03	-06	+00		
45001	000	000	9	-10	+04	7	-18	+09	-07	+03		
45002	000	000	84	-31	+41	18	-21	+06	-14	+01		
45003	000	000	29	-08	+09	0						
45006	000	000	31	-20	+21	6	-09	+01	-06	+01		
**TX	000	000	153	-20	+23	31	-18	+06	-10	+02		
16003	000	000	29	-22	+38	13	+00	+00	-10	+06		
**IA	000	000	29	-22	+38	13	+00	+00	-10	+06		
17001	000	000	21	-36	+58	37	-29	+05	-17	-03		
**KS	000	000	21	-36	+58	37	-29	+05	-17	-03		
26002	000	000	17	-27	+22	0						
**MO	000	000	17	-27	+22	0						
28003	000	000	58	-28	+16	45	-22	+16	-10	+12		
**NB	000	000	58	-28	+16	45	-22	+16	-10	+12		
06001	000	000	43	-26	+33	3	-06	-04	-10	+00		
**CO	000	000	43	-26	+33	3	-06	-04	-10	+00		

TABLE B4. (Cont.)

Reporting Organization	Required Sites No. SLAMS	Required Sites No. NAMS	Precision No. Data Pairs	Precision Prob. Limits Low	Precision Prob. Limits Up	No. Audits	Level 1 Low	Level 1 Up	Level 2 Low	Level 2 Up	Level 3 Low	Level 3 Up
27001	000	000	7	-45	+66	0						
**MT	000	000	7	-45	+66	0						
03100	000	000	13	-05	+11	0						
03200	000	000	0	-03	+07	0						
**AZ	000	000	13	-04	+10	0						
05004	000	000	30	-05	+05	9	-08	+01	-07	-05		
05061	000	000	23	-09	+02	7	-06	+09	-04	+05		
**CA	000	000	53	-07	+03	16	-07	+05	-05	+00		
13001	000	000	15	-24	+20	3	-04	-02	-08	+12		
13002	000	000	29	-36	+19	6			-02	+02		
**ID	000	000	44	-32	+19	9	-04	-01	-04	+05		
38001	000	000		-05	+02		-05	+10	-04	+07		
**OR	000	000		-05	+02		-05	+10	-04	+07		
49001	000	000	77	-15	+11	11	-05	+08	–	–		
**WA	000	000	77	-15	+11	11	-05	+08	–	–		

TABLE B5.. CO PRECISION AND ACCURACY ANNUAL AVERAGES FOR REPORTING ORGANIZATIONS

	Required Sites		Precision			Accuracy						
							Level 1		Level 2		Level 3	
Reporting Organization	No. SLAMS	No. NAMS	No. Data Pairs	Prob. Low	Limits Up	No. Audits	Low	Up	Low	Up	Low	Up
07001	006	000	142	-05	+12	0						
**CT	006	000	142	-05	+12	0						
20001	001	000	49	-06	+05	0						
**ME	001	000	49	-06	+05	0						
22001	004	004	324	-10	+08	18	-07	+07	-06	+07	-07	+07
**MA	004	004	324	-10	+08	18	-07	+07	-06	+07	-07	+07
30001	002	000	268	-09	+06	22	-05	+01	-04	+03	-05	+04
**NH	002	000	268	-09	+06	22	-05	+01	-04	+03	-05	+04
41001	000	002	202	-06	+05	11	-04	+04	-01	+03	-02	+02
**RI	000	002	202	-06	+05	11	-04	+04	-01	+03	-02	+02
47001	001	000	286	-05	+09	5	-12	+12	-10	+12	-07	+10
**VT	001	000	286	-05	+09	5	-12	+12	-10	+12	-07	+10
31001	010	002	52	-13	+07	8	-05	+05	-04	+01	-04	-01
**NJ	010	002	52	-13	+07	8	-05	+05	-04	+01	-04	-01
33001	011	006	238	-08	+04	28	-09	+08	-04	+06	-02	+02
**NY	011	006	238	-08	+04	28	-09	+08	-04	+06	-02	+02
40001	001	002	119	-10	+07	2	-02	-01	-05	+00	-	-
**PR	001	002	119	-10	+07	2	-02	-01	-05	+00	-	-
**DE	003	000	62	-08	+12	11	-09	+07	-04	+07	-05	+08
09001	001	002	97	-07	+03	8	-02	+03	-04	+02	-01	+02
**DC	001	002	97	-07	+03	8	-02	+03	-04	+02	-01	+02
21001	005	002	145	-08	+11	24	-20	+14	-15	+14	-19	+15
**MD	005	002	145	-08	+11	24	-20	+14	-15	+14	-19	+15
39002	001	002	104	-05	+08	34	-13	+08	-06	+02	-03	+01
39003	004	002	85	-13	+05	6	-10	+09	-02	+04	-01	+02
**PA	005	004	189	-09	+06	40	-11	+08	-04	+03	-02	+01
48001	004	002	231	-08	+07	9	-11	+07	-09	+03	-07	+02
48003	004	000	93	-10	+06	13	-04	+08	-08	+07	-08	+05
**VA	008	002	324	-09	+06	22	-07	+07	-09	+05	-08	+04
50001	002	000	26	-07	+07	3	-06	+10	-10	+10	-11	+08
50002	002	000	69	-16	+02	6	-10	+05	-01	+02	-02	+01
**WV	004	000	95	-11	+04	9	-09	+06	-03	+04	-05	+03
01012	002	002	71	-15	+02	13	-34	+26	-03	+05	-04	+11
**AL	002	002	71	-15	+02	13	-34	+26	-03	+05	-04	+11

TABLE B5. (Cont.)

Reporting Organization	Required Sites No. SLAMS	No. NAMS	Precision No. Data Pairs	Prob. Limits Low	Up	Accuracy No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
10001	001	000	55	-10	+08	6	-12	+07	-17	+09	-18	+08
10003	002	000	50	-12	+03	6	+04	+11	+04	+06	-08	+08
10011	003	002	672	-08	+07	24	-04	+08	-03	+05	-04	+04
10012	003	002	111	-14	+07	7	-11	+13	-13	+17	-04	+11
10013	003	002	132	-06	+07	23	-07	+09	-05	+06	-03	+03
10016	002	000	53	-16	+11	6	+01	+12	+04	+08	-01	+05
10017	003	001	118	-05	+06	6	-11	+21	-03	+12	-02	+05
10018	003	000	141	-08	+08	6	-09	+14	+00	+04	-02	+03
**FL	020	007	1,322	-10	+07	85	-06	+11	-04	+08	-05	+05
11010	004	002	186	-11	+06	9	-31	+22	-15	+22	-11	+19
**GA	004	002	186	-11	+06	9	-31	+22	-15	+22	-11	+19
18001	007	000	133	-09	+08	25	-13	+12	-08	+05	-10	+07
18002	001	002	39	-11	+05	6	-09	+03	-10	+08	-02	+05
**KY	008	002	172	-10	+07	31	-11	+09	-08	+06	-07	+06
25100	001	000	43	-04	+04	5	096	+09	-02	+05	-04	+01
**MS	001	000	43	-04	+04	5	096	+09	-02	+05	-04	+01
34001	004	000	40	-04	+02	7	-19	+17	-07	+07	-07	+07
34002	002	000	34	-07	+03	8	-29	+11	-11	+12	-08	+10
34003	003	000	134	-06	+06	59	-07	+05	-03	+04	-02	+03
**NC	009	000	208	-06	+04	74	-17	+09	-06	+07	-05	+06
42001	002	000	226	-10	+10	39	-27	+11	-06	+04	-03	+03
**SC	002	000	226	-10	+10	39	-27	+11	-06	+04	-03	+03
44002	003	002	148	-05	+06	29	-06	+06	-03	+07	-05	+06
44003	003	002	111	-12	-01	26	-15	+07	-14	+08	-17	+11
44004	001	000	10	-05	+05	2	-11	+21	-12	+19	-11	+17
44005	008	004	53	-07	+02	9	-05	+03	-04	+03	-03	+00
**TN	008	004	322	-07	+03	66	-09	+06	-07	+07	-08	+07
14001	008	001	376	-10	+03	10	-11	+08	-06	+02	-01	+02
14003	003	001	70	-11	+08	11	-16	+04	-08	+07	-10	+04
**IL	011	002	446	-10	+06	21	-14	+06	-07	+05	-06	+03
15001	000	002	62	-14	+15	5	-05	+15	-03	+13	-02	+06
15004	000	000	2	-12	+15	0						
15008	001	000	13	-02	+01	3	-03	+07	-01	+05	+00	+05
**IN	001	002	77	-10	+11	8	-04	+12	-02	+10	-01	+05
23001	004	000	0			6	-11	+12	-07	+07	-08	+04
23002	003	002	120	-14	+05	6	-10	+05	+02	+05	+00	+06
**MI	007	002	120	-14	+05	12	-10	+09	-04	+06	-05	+05
24001	008	002	375	-09	+08	23	-14	+21	-06	+13	-06	+08
**MN	008	002	375	-09	+08	23	-14	+21	-06	+13	-06	+08

TABLE B5. (Cont.)

Reporting Organization	Required Sites No. SLAMS	Required Sites No. NAMS	Precision No. Data Pairs	Precision Prob. Limits Low	Precision Prob. Limits Up	Accuracy No. Audits	Level 1 Low	Level 1 Up	Level 2 Low	Level 2 Up	Level 3 Low	Level 3 Up
36001	001	002	70	+05	+13	4	-02	+12	+05	+08	+03	+12
36006	000	002	19*	-10	+11	7	-17	+10	-14	+05	-17	+08
36007	001	000	5	-02	+10	1						
36008	005	002	72	-07	+07	6	-14	-05	-06	+04	-06	+08
36009	000	002	37	-05	+03	6	-14	+07	-12	+04	-11	+04
36010	000	002	50	-10	+09	4	-46	+18	-19	+17	-09	+13
36012	001	000	14	-11	+08	2	+05	+06	+00	+11	-01	+11
36014	001	000	0			2	-11	+05	-10	+07	-10	+05
36015	002	000	83	-07	+04		-03	+06	-06	+12	-03	+09
**OH	011	010	350	-06	+08		-15	+08	-08	+08	-07	+09
51001	005	002	50	+00	+18	6	-04	+22	-04	+11	-03	+05
**WI	005	002	50	+00	+18	6	-04	+22	-04	+11	-03	+05
04001	000	000	19	-03	+05	3	-01	-01	-02	-02	-04	-04
**AR	000	000	19	-03	+05	3	-01	-01	-02	-02	-04	-04
19001	001	002	33*	-13	+13	3	-14	+02	-14	+05	-20	+10
19002	000	000	12	-24	+20	2	-15	+13	-05	+03	-12	+09
**LA	001	002	45	-15	+14	5	-15	+08	-10	+04	-16	+10
32001	004	000	61	-06	+07	8	-10	+05	-04	+06	-04	+06
32002	005	000	115	-04	+05	20	-06	+04	-04	+04	-06	+05
**NM	009	000	176	-05	+06	28	-07	+04	-04	+05	-06	+05
37101	002	000	15	-13	+12	4	-26	-05	-45	-03	-56	-02
37102	000	002	19*	-12	+07	8	-12	+18	-12	+11	-19	+14
37103	002	000	40	-05	+07	10	-11	+15	-05	+07	-02	+03
**OK	004	002	74	-09	+08	22	-15	+12	-16	+06	-19	+06
45001	002	005	2,182	-09	+05	43	-20	+22	-11	+11	-11	+10
45002	000	002	56	-09	+13	8	-11	+21	+00	+07	-06	+07
45003	001	000	26	-08	+02	4	-10	+18	-06	+06	-05	+09
45006	000	001	25	-10	+09	4	-13	-06	-04	+10	-03	+01
**TX	003	008	2,289	-09	+07	59	-14	+16	-06	+09	-07	+07
16001	002	000	70	-21	+19	7	-07	+18	-11	+07	-13	+06
16002	001	000	24	-07	+05	12	-06	+03	-08	+05	-07	+04
16003	001	000	24	-7	+07	4	-22	+03	-12	-01	-19	+10
**IA	004	000	118	-11	+10	23	-12	+06	-10	+03	-13	+07
17001	003	000	72	-07	+07	7	-18	+10	-07	+07	-04	+01
**KS	003	000	72	-07	+07	7	-18	+10	-07	+07	-04	+01
26001	000	001	15*	-07	+09	6	-11	+12	-06	+03	-04	+06
26002	002	002	137	-16	+12	6	-07	+10	-04	+08	-01	+05
26003	004	000	35	-40	+27	7	-29	+12	-13	+04	-08	+02
26004	003	000	60	-09	+14	6	-18	+06	-09	-04	-07	-01
**MO	009	003	247	-16	+15	25	-17	+10	-08	+03	-05	+03

TABLE B5. (Cont.)

Reporting Organization	Required Sites No. SLAMS	No. NAMS	Precision No. Data Pairs	Prob. Limits Low	Up	Accuracy No. Audits	Level 1 Low	Level 1 Up	Level 2 Low	Level 2 Up	Level 3 Low	Level 3 Up
28003	002	000	29	-16	+16	0						
**NB	002	000	29	-16	+16	0						
06001	011	002	44	-14	+08	10						
**CO	011	002	44	-14	+08	10						
27001	001	000	41	-06	+14	6	+03	+24	+03	+13	-01	+10
27003	001	000	59	-10	+06	4	-14	+11	-10	+08	-18	+11
27004	001	000	72	-12	+16	4	+01	+16	-01	+08	-07	+16
**MT	003	000	172	-09	+12	14	-02	+09	-01	+11	-06	+12
46001	009	002	283	-05	+04	24	-06	+04	-06	+02	-05	+02
**UT	009	002	283	-05	+04	24	-06	+04	-06	+02	-05	+02
03100	003	000	57	-10	+03	6	-19	+08	-12	+03	-03	+04
03200	025	003	414	-05	+10	24	-08	+11	-07	+07	-06	+05
03300	001	002	56	-05	+11	3	-08	+02	-01	+05	-09	+05
**AZ	011	004	249	-09	+06	16	-16	+05	-05	+03	-05	+03
05001	025	003	414	-05	+10	24	-08	+11	-07	+07	-06	+05
05004	011	004	415	-04	+04	33	-11	+17	-03	+04	-03	+03
05036	005	002	140	-03	+07	5	-33	+37	-08	+09	-05	+05
05061	019	003	523	-03	+12	24	-03	+19	+01	+12	-03	+08
**CA	060	012	1,492	-04	-08		-09	+17	-03	+08	-04	+05
12120	000	002	153	-16	+24	137	-12	+15	-03	+05	-04	+03
**HI	000	002	153	-16	+24	137	-12	+15	-03	+05	-04	+03
29200	000	002	46	-05	+12	8	-01	+07	-02	+05	+00	+03
29300	001	001	68	-03	+01	4	-01	+01	-12	+06	-06	+02
**NV	003	001	114	-04	+07	12	-01	+04	-06	+05	-03	+03
13001	002	000	29	-11	+01	4	-03	+05	-02	+05	+02	+04
13002	002	000	32	-12	+04	3	-06	+08	-02	+06	-03	+06
**ID	004	000	61	-11	+02	7	-04	+06	-02	+05	-01	+05
38001	005	002	332	-03	+08	57	-18	+24	-09	+08	-07	+03
**OR	005	002	332	-03	+08	57	-18	+24	-09	+08	-07	+03
49001	010	002	550	-07	+01	39	-07	+07	-04	+04	-04	+02
**WAS	010	002	550	-07	+01	39	-07	+07	-04	+04	-04	+02

TABLE B6. AUTOMATED SO_2 PRECISION AND ACCURACY ANNUAL AVERAGES FOR REPORTING ORGANIZATIONS

	Required Sites		Precision			Accuracy						
Reporting Organization	No. SLAMS	No. NAMS	No. Data Pairs	Prob. Limits Low	Prob. Limits Up	No. Audits	Level 1 Low	Level 1 Up	Level 2 Low	Level 2 Up	Level 3 Low	Level 3 Up
07001	008	002	153	-10	+05	14	-08	+04	-08	+03	-08	+06
**CT	008	002	153	-10	+05	14	-08	+04	-08	+03	-08	+06
20001	000	002	98	-07	+05	9	-05	+02	-05	+05	-04	+06
**ME	000	002	98	-07	+05	9	-05	+02	-05	+05	-04	+06
22001	005	012	731	-07	+12	33	-06	+03	-08	+05	-08	+06
**MA	005	012	731	-07	+12	33	-06	+03	-08	+05	-08	+06
30001	006	001	370	-19	+15	33	-07	+05	-09	+05	-09	+06
**NH	006	001	370	-19	+15	33	-07	+05	-09	+05	-09	+06
41001	001	004	399	-10	+07	13	-06	+12	-07	+13	-04	+12
**RI	001	004	399	-10	+07	13	-06	+12	-07	+13	-04	+12
47001	002	001	111	-10	+04	9	-07	+02	-06	+01	-07	+04
**VT	002	001	111	-10	+04	9	-07	+02	-06	+01	-07	+04
31001	006	008	232	-11	+13	16	-12	+08	-08	+09	-05	+07
**NJ	006	008	232	-11	+13	16	-12	+08	-08	+09	-05	+07
33001	021	018	415	-06	+07	88	-08	+11	-08	+11	-10	+12
**NY	021	018	415	-06	+07	88	-08	+11	-08	+11	-10	+12
40001	006	000	276	-11	+06	9	-06	+05	-03	+10	-05	+13
**PR	006	000	276	-11	+06	9	-06	+05	-03	+10	-05	+13
08001	007	001	195	-10	+14	8	-12	+15	-01	+10	-09	+18
**DE	007	001	195	-10	+14	8	-12	+15	-01	+10	-09	+18
09001	000	002	58	-12	+06	8	-15	+16	-03	+10	-10	+07
**DC	000	002	58	-12	+06	8	-15	+16	-03	+10	-10	+07
21001	001	005	182	-12	+12	32	-24	+10	-14	+08	-13	+11
21003	002	000	29	-16	+10	11	-35	-05	-24	-06	-28	-01
**MD	003	005	211	-13	+11	43	-29	+02	-19	+01	-20	+05
39001	013	012	494	-10	+11	27	-14	+12	-15	+09	-11	+10
39002	002	005	221	-11	+05	77	-11	+09	-09	+08	-14	+12
39003	002	005	124	-17	+03	9	-17	+07	-14	+09	-09	+07
**PA	017	022	839	-12	+06	113	-14	+09	-13	+09	-11	+10
48001	003	007	281	-14	+07	11	-14	+09	-13	+12	-13	+09
48003	004	000	96	-10	+07	12	-11	+08	-09	+13	-12	+14
**VA	007	007	377	-12	+07	23	-12	+08	-11	+12	-13	+11
50001	001	003	77	-09	+08	9	-08	+11	-07	+08	-10	+10
50002	003	003	94	-13	+07	9	-11	+07	-08	+07	-07	+06
**WV	004	006	171	-11	+07	18	-09	+09	-08	+07	-09	+08

TABLE B6. (Cont.)

	Required Sites		Precision			Accuracy						
Reporting Organization	No. SLAMS	No. NAMS	No. Data. Pairs	Prob. Limits Low	Up	No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
01011	002	000	57	-14	+06	6	-18	-11	-19	-11	-18	-12
01012	001	000	4	-45	+34	1						
01013	002	000	37	-21	+13	6	-22	+13	-18	+09	-16	+11
01016	000	000	655	-15	+13	2	-21	+03	-13	+08	-13	+01
**AL	006	000	753	-21	+14	15	-20	-01	-18	-01	-17	-02
10001	001	000	55	-12	+06	6	-25	+13	-15	+07	-20	+24
10002	002	000	93	-26	+15	7	-39	+13	-28	+07	-25	+05
10003	002	000	33	-11	+06	7	-33	+30	-16	+17	-09	+14
10004	001	000	39	-16	+07	6	-35	+22	-10	+06	-17	+12
10005	000	000	32	-23	+04	4	-17	+08	-13	+11	-07	+15
10007	000	000	27	-18	+12	7	-49	+14	-45	+33	-40	+29
10011	003	001	467	-11	+03	19	-18	+15	-13	+12	-10	+09
10012	003	002	170	-17	+08	7	-01	+13	-15	+15	-10	+15
10013	001	002	167	-12	+07	15	-20	+09	-14	+08	-13	+05
10015	000	000				1						
10016	001	000	42	-15	+06	6	-08	+05	-07	+14	-02	+13
10016	002	000	32	-09	+07	6	-19	-01	-20	-03	-14	-05
**FL	016	005	1,157	-15	+07	91	-22	+11	-17	+11	-15	+11
11010	010	001	355	-17	+10	14	-23	+16	-19	+17	-18	+19
**GA	010	001	355	-17	+10	14	-23	+16	-19	+17	-18	+19
18001	008	000	185	-20	+04	29	-20	+08	-17	+07	-18	+08
18002	000	004	50*	-19	+13	5	-09	+15	+04	+11	-05	+05
18003	000	000	1,295	-16	+09	4	-15	+08	-16	+11	-14	+10
**KY	008	004	1,530	-18	+08	38	-16	+10	-11	+09	-14	+07
25100	002	002	217	-26	+05	8	-22	+21	-18	+12	-17	+08
**MS	002	002	217	-26	+05	8	-22	+21	-18	+12	-17	+08
34001	004	001	98	-07	+06	18	-16	+12	-18	+13	-17	+12
34003	000	000	26	-23	+13	12	-28	+08	-26	+07	-28	+07
**NC	005	001	124	-15	+09	30	-23	+10	-23	+09	-23	+09
42001	003	001	752	-08	+06	75	-13	+10	-10	+08	-10	+08
**SC	003	001	752	-08	+06	75	-13	+10	-10	+08	-10	+08
44001	002	000	181	-08	+08	10	-08	+04	-07	+05	-08	+04
44002	001	000	29	-13	+10	6	-07	+08	-07	+11	-08	+10
44003	000	001	24	-19	+12	8	-08	+07	-11	+15	-10	+14
44006	000	000	2,153	-14	+10	46	-18	+16	-12	+14	-12	+11
**TN	003	001	2,387	-13	+10	70	-10	+08	-09	+11	-09	+09
14001	010	011	852	-17	+07	19	-17	+09	-14	+09	-16	+10
14003	005	003	141	-15	+15	18	-16	+10	-13	+06	-13	+06
**IL	015	014	993	-16	+11	37	-16	+09	-14	+08	-14	+08

TABLE B6. (Cont.)

Reporting Organization	Required Sites No. SLAMS	No. NAMS	Precision No. Data Pairs	Prob. Limits Low	Up	Accuracy No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
15001	002	005	206	-14	+10	14	-20	+23	-14	+15	-09	+10
15008	003	000	74	-08	+05	9	-11	+03	-11	+03	-08	+04
15101	000	000	90	-13	+08	22	-48	+33	-13	+04	-13	+05
**IN	005	005	370	-11	+07	45	-20	+17	-13	+09	-09	+07
23001	001	007	143	-17	+08	11	-15	+12	-08	+13	-08	+14
23002	004	004	127	-24	+08	8	-17	+11	-06	+03	-05	+04
**MI	005	011	270	-20	+08	19	-16	+11	-07	+08	-07	+09
24001	003	008	639	-10	+09	38	-18	+13	-11	+10	-12	+08
**MN	003	008	639	-10	+09	38	-18	+13	-11	+10	-12	+08
36001	000	002	35*	-15	+04	4	-20	+07	-21	+10	-20	+09
36002	002	003	70	-15	+15	4	-27	+25	-17	+17	-19	+22
36003	001	000	29	-14	+14	2	-23	-10	-15	-10	-12	+09
36006	000	003	59	-15	+05	6	-27	+20	-09	+13	-07	+13
36007	000	002	35*	-08	+07	8	-13	+13	-07	+09	-07	+04
36008	006	003	186	-12	+10	8	-06	+01	-04	+04	-05	+05
36009	000	005	74*	-23	+12	3*	-01	+09	-01	+09	-03	+06
36010	001	001	45	-23	+04	4	-21	-05	-22	-04	-23	-02
36012	002	000	47	-11	+06	4	-27	+32	-16	+18	-22	+24
36013	002	000	0			2	-07	-04	-12	-04	-12	-05
36014	003	001	56	-14	+13	9	-13	+07	-10	+10	-10	+12
36015	000	003	134	-09	+09	4	-13	+01	-13	+04	-14	+09
36016	000	002	56	-14	+15	6	-37	+14	-30	+10	-24	+02
**OH	017	025	826	-14	+09	64	-19	+09	-14	+08	-13	+09
51001	001	013	319	-16	+10	14	-14	+14	-11	+09	-11	+06
**WI	001	013	319	-16	+10	14	-14	+14	-11	+09	-11	+06
04001	001	001	47	-09	+10	8	-10	+03	-05	+04	-02	+04
**AR	001	001	47	-09	+10	8	-10	+03	-05	+04	-02	+04
19001	009	001	68	-15	+12	4	-15	+09	-11	+07	-15	+06
19002	000	000	7	-26	+15	2	-17	+15	-12	+13	-13	+14
**LA	009	001	75	-17	+13	6	-15	+11	-11	+09	-14	+08
32001	012	000	155	-12	+11	8	-12	+07	-10	+06	-10	+07
32002	000	001	14*	-12	+02	7	-16	+06	-16	+06	-13	+05
**NM	012	001	169	-12	+04	15	-13	+07	-12	+06	-11	+06
37101	005	000	25	-18	+06	4	-50	+30	-43	+24	-50	+28
37102	001	000	0			3			-22	-01	-26	+01
37103	001	001	47	-12	+03	9	-09	+04	-07	+05	-12	+09
**OK	007	001	72	-15	+02	16	-22	+13	-19	+10	-25	+13
45001	006	004	4,521	-08	+05	95	-18	+25	-11	+12	-10	+12
45002	001	000	33	-21	+04	4	-23	+14	-16	+10	-14	+11
45006	001	000	66	-19	+06	10	-19	+12	-18	+13	-14	+10
**TX	008	004	4,620	-16	+05	109	-19	+18	-14	+12	-12	+11

TABLE B6. (Cont.)

Reporting Organization	Required Sites		Precision			Accuracy						
	No. SLAMS	No. NAMS	No. Data Pairs	Prob. Limits Low	Up	No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
16001	001	000	31	-09	+06	6	-07	+21	-04	+18	+00	+01
16002	001	001	39	-05	+12	18	-04	+08	-05	+10	-10	+11
16003	001	002	90	-14	+09	15	-18	+17	-20	+17	-05	+07
**IA	003	003	160	-09	+09	39	-10	+14	-11	+14	-06	+07
17001	000	002	41	-30	+01	2	-25	+04	-20	+01	-10	+00
**KS	000	002	41	-30	+01	2	-25	+04	-20	+01	-10	+00
26001	004	000	168	-27	+27	9	-07	+12	-08	+07	-09	+05
26002	002	002	127	-11	+06	6	-17	+06	-19	+08	-13	+04
26003	003	002	44	-22	+26	6	-11	-01	-06	+05	-03	+07
26004	001	001	52	-22	+22	6	-37	+02	-24	+04	-17	+05
26005	001	000	26	-28	+22	4	-14	+22	-17	+10	-18	+12
**MO	011	005	417	-21	+20	31	-17	+06	-14	+06	-11	+06
28003	000	001	17*	-16	+10	2	-20	+07	-04	+01	-03	+09
**NB	000	001	17*	-16	+10	2	-20	+07	-04	+01	-03	+09
06001	001	002	50	-15	+19	5	-12	+05	-01	+04	-02	+07
**CO	001	002	50	-15	+19	5	-12	+05	-01	+04	-02	+07
27001	000	001	31	-14	+08	3	-42	+28	-40	+27	-27	+20
**MT	000	001	31	-14	+08	3	-42	+28	-40	+27	-27	+20
35001	005	000	102	-08	+04	8	-09	+17	-10	+13	-11	+09
**ND	005	000	102	-08	+04	8	-09	+17	-10	+13	-11	+09
46001	006	002	240	-09	+06	21	-14	+11	-11	+08	-07	+06
**UT	006	002	240	-09	+06	21	-14	+11	-11	+08	-07	+06
03100	011	000	206	-09	+11	4	-21	+16	-16	+24	-15	+18
03300	000	001	25	-13	+16	1	-10	+17	-11	+15	-12	+15
**AZ	011	002	231	-11	+14	5	-13	+16	-13	+18	-13	+16
05001	017	002	316	-14	+13	13	-13	+12	-12	+12	-14	+12
05004	008	002	129	-14	+02	17	-10	+11	-09	+10	-09	+11
05036	006	000	85	-16	+12	3	-18	+16	-03	+01	-01	+18
05061	013	004	438	-20	+10	20	-11	+12	-11	+14	-15	+08
**CA	044	008	968	-16	+09	53	-12	+12	-10	+11	-11	+11
13001	003	000	70	-13	+10	6	-14	+07	-08	+03	-08	+05
13002	003	000	51	-13	+08	6	-17	+07	-12	+07	-11	+04
**ID	006	000	121	-13	+09	12	-16	+07	-10	+05	-09	+04
38001	002	002	66	-19	+09	16	-22	+01	-17	+06	-19	+10
**OR	002	002	66	-19	+09	16	-22	+01	-17	+06	-19	+10
49001	005	003	389	-09	+07	21	-08	+10	-10	+09	-09	+09
**WA	005	003	389	-09	+07	21	-08	+10	-10	+09	-09	+09

TABLE B7. AUTOMATED NO_2 PRECISION AND ACCURACY ANNUAL AVERAGES FOR REPORTING ORGANIZATIONS

Reporting	Required Sites		Precision			Accuracy						
	No.	No.	No. Data	Prob. Limits		No.	Level 1		Level 2		Level 3	
Organization	SLAMS	NAMS	Pairs	Low	Up	Audits	Low	Up	Low	Up	Low	Up
07001	003	000	28	-12	+10	3	-10	+14	-06	+04	-04	+01
**CT	003	000	28	-12	+10	3	-10	+14	-06	+04	-04	+01
22001	004	002	136	-14	+10	11	-10	+17	-09	+12	-07	+10
**MA	004	002	136	-14	+10	11	-10	+17	-09	+12	-07	+10
41001	001	000	42	-07	+17	3	-22	+10	-15	+06	-16	+05
**RI	001	000	42	-07	+17	3	-22	+10	-15	+06	-16	+05
31001	004	002	55	-15	+09	8	-20	+16	-11	+09	-07	+01
**NJ	004	002	55	-15	+09	8	-20	+16	-11	+09	-07	+01
33001	001	002	59	-13	+11	33	-11	+10	-08	+06	-10	+05
**NY	001	002	59	-13	+11	33	-11	+10	-08	+06	-10	+05
08001	002	000	38	-11	+16	7	-19	+20	-07	+04	-09	+00
**DE	002	000	38	-11	+16	7	-19	+20	-07	+04	-09	+00
09001	000	002	50	-09	+10	8	-08	+06	-05	+03	-04	+02
**DC	000	002	50	-09	+10	8	-08	+06	-05	+03	-04	+02
21001	003	001	77	-18	+14	9	-32	+09	-19	+03	-08	-01
21003	002	000	22	-08	+08	6	-57	+75	-19	+25	-11	+04
21005	001	001	80	-05	+10	8	-24	+10	-13	+03	-10	+05
**MD	006	002	179	-11	+11	23	-36	+27	-17	+09	-10	+02
39001	017	000	298	-11	+09	16	-09	+21	-14	+20	-17	+18
39002	000	002	26	-08	+07	14	-11	+13	-06	+07	-07	+03
39003	002	002	48	-17	+12	5	-20	+28	-11	+13	-09	+06
**PA	019	004	372	-12	+09	35	-13	+21	-10	+13	-11	+09
48001	003	000	125	-08	+07	9	-28	+20	-11	+01	-13	+00
48003	004	000	64	-25	+16	7	-22	+15	-16	+09	-11	+05
**VA	007	000	189	-17	+12	16	-25	+17	-13	+05	-12	+02
50001	002	000	51	-07	+12	6	-11	+10	-03	+04	-10	+07
50002	002	000	53	-09	+13	6	-06	+21	-01	+06	-04	+04
**WV	004	000	104	-08	+13	12	-08	+16	-02	+05	-07	+06
01014	000	000	14	-04	+05	0						
01015	000	000	0			1						
**AL	001	000	14	-04	+05	1						
10001	001	000	46	-10	+08	0						
10003	001	000	5	-28	+27	2						
10011	002	000	68	-13	+06	2						
10012	002	000	35	-35	+42	3						
10013	001	000	23	-08	+12	4	-22	+40	-50	+24	-43	+20
10016	002	000	27	-15	+21	0						
10018	000	002	19	-20	+29	0						
**FL	010	002	223	-17	+19	11	-22	+40	-50	+24	-43	+20

TABLE B7. (Cont.)

	Required Sites		Precision			Accuracy						
Reporting Organization	No. SLAMS	No. NAMS	No. Data Pairs	Prob. Limits Low	Up	No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
11010	000	002	28	+03	+29	4	-49	+32	-49	+39	-18	+33
**GA	000	002	28	+03	+29	4	-49	+32	-49	+39	-18	+33
18001	006	000	105	-14	+10	18	-29	+35	-20	+21	-19	+15
18002	001	000	9	-23	+10	5	-38	+21	-33	+18	-33	+18
18003	000	000	368	-17	+13	1						
**KY	007	000	482	-18	+11	24	-32	+30	-24	+20	-24	+16
34004	000	000	20	-13	+18	4	-66	-24	-14	-12	-09	+01
**NC	000	000	20	-13	+18	4	-66	-24	-14	-12	-09	+01
44006	000	000	483	-20	+15	0						
**TN	000	000	483	-20	+15	0						
14001	003	001	119	-13	+06	7	-20	+15	-09	+08	-04	+04
14003	003	001	39	-19	+19	8	-13	+01	-06	+00	-06	+01
**IL	006	002	158	-15	+12	15	-17	+08	-07	+04	-05	+03
15008	001	000	17	-17	+11	4	-26	+15	-15	-01	-15	-03
**IN	001	000	17	-17	+11	4	-26	+15	-15	-01	-15	-03
23002	000	002	13	-15	+04	4	-17	-14	-12	-07	-12	-07
**MI	000	002	13	-15	+04	4	-17	-14	-12	-07	-12	-07
24001	000	002	74	-09	+08	6	-23	+21	-10	+16	-07	+12
**MN	000	002	74	-09	+08	6	-23	+21	-10	+16	-07	+12
36001	001	000	0			2	-31	-03	-32	+03	-37	+06
36003	000	000	0			2	-03	+01	-03	-02	-05	+00
36007	001	000	0			2	-48	+56	-22	+26	-10	+02
36008	004	002	52	-14	+19	4	-16	+22	-02	+06	-04	+07
36009	000	002	15	-17	+15	4						
36010	000	000	2	-02	+05	4	-21	+12	-13	+03	-09	+02
36014	001	000	23	-17	+10	4	-16	+28	-06	+14	-02	+11
**OH	007	004	92	-14	+14	24	-24	+23	-13	+10	-10	+05
51001	000	002	50	-08	+10	4	+15	+25	-12	+20	-05	+06
**WI	000	002	50	-08	+10	4	+15	+25	-12	+20	-05	+06
04001	001	000	25	-09	+07	4	-15	+14	-08	+02	-09	+05
**AR	001	000	25	-09	+07	4	-15	+14	-08	+02	-09	+05
19001	015	002	18	-07	+09	1						
19002	000	000	6	-10	+21	0						
**LA	015	002	24	-08	+13	1						
32002	001	000	13	-08	+08	6	-14	+16	-12	+19	-12	+20
**NM	001	000	13	-08	+08	6	-14	+16	-12	+19	-12	+20

TABLE B7. (Cont.)

Reporting Organization	Required Sites No. SLAMS	Required Sites No. NAMS	Precision No. Data Pairs	Precision Prob. Limits Low	Precision Prob. Limits Up	Accuracy No. Audits	Accuracy Level 1 Low	Accuracy Level 1 Up	Accuracy Level 2 Low	Accuracy Level 2 Up	Accuracy Level 3 Low	Accuracy Level 3 Up
37101	002	000	0			2	-70	+49	-89	+60	-84	+59
37102	001	000	9	-20	+09	4	-12	-09	-14	+00	-18	+00
37103	003	000	27	-10	+05	9	-18	+06	-18	+04	-16	+06
**OK	006	000	36	-16	+07	15	-24	+08	-27	+11	-26	+12
45001	004	002	2,185	-08	+04	59	-34	+37	-12	+16	-14	+13
45002	000	001	46	-11	+16	7	-14	+03	-19	+18	-23	+19
45006	002	001	41	-09	+06	6	-08	+03	-08	+02	-04	+00
**TX	006	004	2,272	-09	+09	72	-20	+17	-13	+12	-14	+11
17001	001	000	10	-56	+09	0						
**KS	001	000	10	-56	+09	0						
26001	000	002	49	-16	+17	5	-06	+09	-03	+02	-11	+06
26002	002	001	112	-12	+16	4	-23	+19	-11	+02	-05	-05
26003	004	000	22	-49	+40	4	-28	+32	-12	+11	-06	+11
26004	001	001	50	-25	+30	6	-25	+02	-31	+04	-23	+04
**MO	007	004	233	-22	+24	19	-22	+14	-17	+04	-12	+02
06001	002	002	48	-12	+11	8	-32	+55	-11	+21	-07	+14
**CO	002	002	48	-12	+11	8	-32	+55	-11	+21	-07	+14
35001	002	000	49	-08	+07	4	-22	+15	-05	+01	-07	+02
**ND	002	000	49	-08	+07	4	-22	+15	-05	+01	-07	+02
46001	004	000	65	-13	+08	6	-11	+14	-07	+08	-08	+08
**UT	004	000	65	-13	+08	6	-11	+14	-07	+08	-08	+08
03300	002	000	38	-17	+09	2	-02	+05	-02	+07	-03	+05
**AZ	002	000	38	-17	+09	2	-02	+05	-02	+07	-03	+05
05001	029	000	368	-18	+13	15	-22	+09	-15	+06	-20	+16
05004	008	004	311	-08	+08	24	-13	+10	-12	+09	-12	+09
05036	004	002	0			2	-15	+09	-23	+13	-24	+15
05061	016	004	408	-09	+18	20	-23	+19	-16	+16	-14	+14
**CA	057	010	1,087	-12	+13	61	-18	+13	-15	+11	-16	+13
29300	002	000	39	-03	+02	4	+00	+00	-11	+05	-06	+01
**NV	002	000	39	-03	+02	4	+00	+00	-11	+05	-06	+01
38001	001	000	0			13	-64	+21	-48	+16	-43	+17
**OR	001	000	0			13	-64	+21	-48	+16	-43	+17
49001	000	002	31	-09	+08	4					-14	+12
**WA	000	002	31	-09	+08	4					-14	+12

TABLE B8. OZONE PRECISION AND ACCURACY ANNUAL AVERAGES FOR REPORTING ORGANIZATIONS

Reporting Organization	Required Sites No. SLAMS	No. NAMS	Precision No. Data Checks	Prob. Limits Low	Up	Accuracy No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
07001	002	006	105	-08	+08	8	-05	+05	-05	+02	-07	+05
**CT	002	006	105	-08	+08	8	-05	+05	-05	+02	-07	+05
20001	003	000	70	-05	+08	3	-05	+17	-07	+13	-04	+08
**ME	003	000	70	-05	+08	3	-05	+17	-07	+13	-04	+08
22001	005	008	309	-18	+09	20	-15	+12	-11	+09	-11	+10
**MA	005	008	309	-18	+09	20	-15	+12	-11	+09	-11	+10
30001	005	001	355	-13	+08	25	-09	+06	-08	+03	-12	+02
**NH	005	001	355	-13	+08	25	-09	+06	-08	+03	-12	+02
41001	001	001	156	-08	+09	10	-03	+08	-02	+07	-05	+06
**RI	001	001	156	-08	+09	10	-03	+08	-02	+07	-05	+06
47001	002	000	26	-07	+06	2	+04	+06	-02	-01	-04	+00
**VT	002	000	26	-07	+06	2	+04	+06	-02	-01	-04	+00
31001	007	006	143	-11	+10	10	-07	+01	-03	+03	-06	+05
**NJ	007	006	143	-11	+10	10	-07	+01	-03	+03	-06	+05
33001	014	011	216	-08	+08	54	-13	+09	-10	+10	-10	+10
**NY	014	011	216	-08	+08	54	-13	+09	-10	+10	-10	+10
40001	002	000	39	-05	+04	0						
**PR	002	000	39	-05	+04	0						
08001	003	001	95	-06	+12	10	-06	+06	-03	+08	-03	+10
**DE	003	001	95	-06	+12	10	-06	+06	-03	+08	-03	+10
09001	001	001	58	-08	+10	8	-10	+15	-10	+10	-10	+09
**DC	001	001	58	-08	+10	8	-10	+15	-10	+10	-10	+09
21001	007	002	367	-05	+12	59	-22	+16	-16	+16	-13	+16
21003	004	000	46	-09	+04	16	-20	+12	-15	+16	-16	+18
21005	003	001	158	-09	+08	19	-19	+22	-14	+19	-05	+12
**MD	014	003	571	-07	+08	94	-20	+16	-15	+17	-11	+15
39001	018	008	420	-13	+13	26	-18	+15	-14	+10	-15	+09
39002	002	002	57	-05	+08	15	-07	+19	-06	+05	-08	+03
39003	001	001	23	-04	+05	4	-11	+07	-05	+02	-06	+01
**PA	021	011	500	-08	+09	45	-13	+13	-09	+06	-10	+05
48001	004	005	218	-08	+06	15	-08	+09	-08	+08	-08	+07
48003	004	000	91	-14	+11	11	-04	+07	-07	+09	-08	+08
**VA	008	005	309	-11	+08	26	-06	+08	-08	+09	-08	+08
50001	003	000	53	-10	+07	6	+03	+09	-02	+08	+00	+05
50002	001	000	47	-04	+09	3	-02	+09	+00	+03	-03	+04
**WV	004	000	100	-07	+08	9	+02	+09	-02	+07	-01	+05

TABLE B8. (Cont.)

	Required Sites		Precision			Accuracy						
Reporting Organization	No. SLAMS	No. NAMS	No. Data Pairs	Prob. Limits Low	Up	No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
01011	003	000	64	-13	+11	4	-16	+11	-06	+05	-03	+03
01012	002	001	27	-05	+05	4	-10	+03	-15	+05	-23	+04
01013	002	000	39	-14	+12	7	-07	+06	-11	+07	-15	+07
01014	000	000	13	-06	+08	3	-98	+59	-12	+25	-04	+13
01015	000	000	25	+00	+19	5	-21	-01	-08	+02	-08	+03
01016	000	000	91	-07	+08	0						
**AL	007	001	44	-07	+11	23	-23	+10	-10	+07	-10	+05
10001	003	000	138	-07	+09	8	-16	+22	-06	+13	-07	+12
10003	001	001	32	-18	+13	6	-13	+12	-08	+10	-04	+07
10005	000	000	30	-10	+18	4	-01	+15	+03	+03	-01	+01
10007	000	000	7	+05	+20	3	-08	+10	-12	+06	-10	-01
10011	000	002	216	-09	+05	10	-14	+05	-07	+00	-12	+04
10012	002	001	73	-11	+14	5	-16	+21	-22	+23	-26	+23
10013	002	001	80	-08	+05	15	-15	+12	-12	+10	-07	+09
10014	000	000	25	-07	+11	6	-16	+11	-10	+12	-12	+11
10015	000	000	0			2	-03	+06	-05	+20	-05	+22
10016	000	004	93	-08	+10	6	-17	+10	-19	+08	-19	+04
10017	000	000	46	-04	+06	6	-12	+13	-13	+10	-15	+10
10018	001	004	81	+00	+00	6	-18	+30	-11	+15	-06	+10
**FL	009	013	821	-08	+09	78	-14	+14	-11	+10	-11	+09
11010	000	004	111	-13	+08	5	-17	+14	-16	+38	-17	+40
**GA	000	004	111	-13	+08	5	-17	+14	-16	+38	-17	+40
18001	012	000	440	-13	+11	61	-17	+14	-16	+13	-14	+11
18002	001	001	36	-20	+12	6	-11	+09	-02	+08	-04	+06
18003	000	000	453	-17	+16	0						
**KY	013	001	929	-16	+13	67	-15	+13	-11	+11	-11	+09
25100	002	000	217	-11	+13	7	-16	+09	-03	-03	-06	+04
**MS	002	000	217	-11	+13	7	-16	+09	-03	-03	-06	+04
34001	006	002	121	-07	+06	20	-11	+11	-08	+08	-07	+06
34002	001	000	11	-10	+10	2	+08	+08	-02	-01	-02	-01
34003	000	001	74	-09	+09	31	-10	+10	-06	+08	-07	+07
34004	001	000	18	-07	+06	2	-13	+00	-03	+00	-03	+00
**NC	008	003	224	-08	+08	55	-09	+09	-06	+06	-06	+05
42001	003	004	1,142	-06	+04	92	-12	+11	-12	+10	-11	+09
**SC	003	004	1,142	-06	+04	92	-12	+11	-12	+10	-11	+09
44001	001	001	128	-06	+08	16	-13	+08	-12	+09	-11	+09
44002	000	002	60	-06	+06	14	-05	+06	-06	+08	-07	+08
44003	001	001	48	-07	+03	12	-15	+08	-10	+06	-11	+06
44004	002	000	69	-05	+09	16	-06	+08	-02	+05	-03	+04
44005	000	002	84	-06	+05	13	-06	+02	-06	+04	-06	+04
44006	000	000	398	-17	+18	6	-18	+13	-15	+13	-16	+12
**TN	004	006	787	-07	+08	77	-10	+07	-08	+07	-09	+07

TABLE B8. (Cont.)

	Required Sites		Precision									
Reporting Organization	No. SLAMS	No. NAMS	No. Data Pairs	Prob. Limits Low	Up	No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
14001	021	010	890	-13	+09	23	-08	+08	-08	+03	-09	+02
14003	007	001	106	-19	+12	14	-11	+16	-15	+12	-13	+09
**IL	028	011	996	-16	+10	37	-09	+12	-11	+07	-11	+06
15001	002	005	181	-11	+11	9	-10	+04	-08	+03	-10	+04
15002	001	000	5	-15	+19	2	-05	+07	-05	+03	-06	-06
15003	000	002	18	-06	+13	4	-08	+11	-13	+13	-10	+10
15008	001	000	64	-11	+14	8	-11	+07	-11	+06	-10	+06
15010	000	000	21	-09	+06	4	-12	+08	-09	+06	-09	+06
**IN	004	007	289	-10	+12	27	-10	+07	-10	+06	-09	+05
23001	004	007	156	-12	+15	18	-11	+08	-06	+05	-07	+05
23002	003	001	98	-13	+08	6	-10	+15	-01	+07	+00	+06
**MI	007	008	254	-12	+11	24	-11	+10	-04	+06	-05	+05
24001	006	002	343	-13	+12	16	-10	+06	-08	+07	-07	+05
**MN	006	002	343	-13	+12	16	-10	+06	-08	+07	-07	+05
36001	001	002	67	-16	+12	7	-06	+06	-06	+04	-03	+04
36002	003	000	60	-16	+13	4	-21	+11	-20	+12	-22	+13
36003	000	000	19	-12	+05	2	-33	+06	-17	-17	-20	-20
36005	001	000	42	-14	+12	5	-13	-02	-13	+02	-12	+01
36006	000	002	36	-12	+09	9	-12	+24	-07	+16	-07	+12
36007	000	002	34	-07	+05	6	-10	+12	-09	+07	-10	+07
36008	005	003	144	-09	+08	26	-05	+07	-03	+07	-02	+08
36009	002	001	55	-05	+09	11	-07	+12	-12	+11	-07	+12
36010	003	001	46	-15	+13	9	-12	+24	-05	+13	-05	+16
36012	000	001	19	-03	+06	4	-35	+27	-27	+14	-23	+08
36014	001	000	17	-10	+10	5	-05	+06	-06	+01	-07	+01
36015	000	002	49	-13	+11	4	-02	+09	-01	+07	-01	+07
36016	000	001	19	-01	+03	8	-09	+11	-11	+04	-15	+02
**OH	016	016	607	-10	+09	100	-11	+12	-09	+08	-09	+07
51001	017	004	97	-12	+08	5	-19	+18	-14	+10	-12	+10
**WI	017	004	97	-12	+08	5	-19	+18	-14	+10	-12	+10
04001	000	002	50	-06	+05	7	-13	+03	-11	+02	-13	+04
**AR	000	002	50	-06	+05	7	-13	+03	-11	+02	-13	+04
19001	016	006	191	-09	+09	18	-09	+11	-14	+17	-12	+15
19002	000	000	38	-13	+16	6	-11	+10	-02	+09	-01	+12
**LA	016	006	229	-10	+10	24	-10	+11	-11	+15	-09	+14
32001	003	000	53	-09	+09	10	-08	+10	-08	+04	-10	+02
32002	003	002	72	-08	+04	17	-09	+01	-09	+01	-11	+01
**NM	006	002	125	-08	+06	27	-09	+05	-08	+02	-11	+01
37101	002	001	28	-09	+07	4	-04	+11	-02	+05	-04	+04
37103	001	002	59	-12	+06	10	-07	+04	-04	+04	-05	+05
**OK	003	004	87	-10	+06	14	-06	+06	-03	+04	-05	+05

TABLE B8. (Cont.)

	Required Sites		Precision			Accuracy						
Reporting	No.	No.	No. Data	Prob. Limits		No.	Level 1		Level 2		Level 3	
Organization	SLAMS	NAMS	Pairs	Low	Up	Audits	Low	Up	Low	Up	Low	Up
45001	009	014	4,920	-07	+09	109	-20	+32	-15	+20	-16	+17
45002	002	001	125	-12	+10	17	-19	+08	-18	+10	-17	+11
45006	006	000	132	-17	+09	21	-06	+10	-05	+11	-07	+12
**TX	017	015	5,177	-12	+09	147	-15	+17	-13	+14	-13	+13
16001	001	002	91	-01	+03	7	-11	+07	-28	+13	-24	+15
16002	001	000	24	-03	+15	12	-03	+14	-04	+09	-06	+07
16003	001	001	61	-10	+09	4	-11	+11	-09	+05	-07	+05
**IA	003	003	176	-04	+09	23	-08	+11	-11	+08	-10	+08
17001	000	002	70	-20	+12	7	-12	+11	+01	+04	-05	+05
**KS	000	002	70	-20	+12	7	-12	+11	+01	+04	-05	+05
26001	002	002	132	-09	+11	7	-02	+06	-07	+06	-07	+03
26002	003	001	61	-09	+09	6	-04	+09	+01	+07	+02	+04
26003	005	000	34	-30	+22	7	-15	+08	-14	+02	-16	+04
26004	001	001	56	-09	+14	6	-14	+05	-10	-03	-11	-08
26005	001	000	15	-15	+24	1						
**MO	012	004	298	-13	+15	27	-07	+07	-07	+04	-07	+01
28003	001	002	49	-11	+12	4	-11	-05	-12	-04	-09	-04
**NB	001	002	49	-11	+12	4	-11	-05	-12	-04	-09	-04
06001	008	003	102	-20	+13	14	-14	+07	-11	+06	-14	+07
**CO	008	003	102	-20	+13	14	-14	+07	-11	+06	-14	+07
35001	002	000	43	-09	+10	3	-11	+05	-11	+04	-13	+05
**ND	002	000	43	-09	+10	3	-11	+05	-11	+04	-13	+05
46001	007	002	196	-12	+08	19	-07	+10	-06	+08	-06	+08
**UT	007	002	196	-12	+08	19	-07	+10	-06	+08	-06	+08
03100	003	000	26	-05	+13	4	-18	+04	-12	+00	-10	+00
03200	007	003	157	-09	+08	7	-06	+08	-05	+04	-05	+04
03300	002	002	68	-07	+09	1	-02	+07	-04	+07	-06	+07
**AZ	012	005	251	-07	+09	12	-07	+07	-06	+04	-06	+04
05001	045	008	549	-16	+10	50	-18	+08	-14	+06	-12	+05
05004	017	004	480	-07	+06	42	-14	+10	-09	+05	-08	+03
05036	006	002	146	-08	+06	5	+08	+06	-03	-03	-03	+03
05061	025	004	165	-05	+19	32	-20	+07	-09	+05	-08	+07
**CA	093	018	1,340	-09	+09	129	-17	+08	-10	+04	-09	+05
12120	000	001	52	-07	+14	61	-25	+19	-07	+06	-08	+10
**HI	000	001	52	-07	+14	61	-25	+19	-07	+06	-08	+10
29200	000	002	42	-11	+06	8	-26	+20	-12	+12	-05	+10
29300	001	002	96	-10	+05	4	+00	+00	-04	+10	-06	+11
**NV	001	004	138	-10	+05	12	-15	+11	-08	+11	-06	+10

TABLE B8. (Cont.)

Reporting Organization	Required Sites No. SLAMS	No. NAMS	Precision No. Data Pairs	Prob. Limits Low	Up	Accuracy No. Audits	Level 1 Low	Up	Level 2 Low	Up	Level 3 Low	Up
38001	004	002	158	-16	+05	30	-32	+23	-25	+23	-25	+24
**OR	004	002	158	-16	+05	30	-32	+23	-25	+23	-25	+24
49001	003	005	295	-07	+07	27	-07	+05	-07	+08	-07	+08
**WA	003	005	295	-07	+07	27	-07	+05	-07	+08	-07	+08

APPENDIX C

TABLE C1. PARS AND PA DATA FOR CO, Pb, TSP, NO_2 (MANUAL) AND SO_2 (MANUAL)

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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM
              COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  01  STATE  07  CONNECTICUT                   REP ORG  001  LAB  306001

                    ----------------PROBABILITY LIMITS-----------------
 POL.CD.     AUDITS      LEVEL 1         LEVEL 2        LEVEL 3        LEVEL 4
                        LOW     UP      LOW     UP     LOW     UP     LOW     UP

I12128 LEAD     12       -8     -2       -4     -3      -6     -1
   PARS      (  31)                   ( -8) ( +6)

I11101 HIV      30      TOTAL            -4     +2
   PARS      ( 148)                   ( -8) ( +3)

REGION  01  STATE  20  MAINE                         REP ORG  001  LAB  301001

                    ----------------PROBABILITY LIMITS-----------------
 POL.CD.     AUDITS      LEVEL 1         LEVEL 2        LEVEL 3        LEVEL 4
                        LOW     UP      LOW     UP     LOW     UP     LOW     UP

I11101 HIV      39      TOTAL           -11     +8
   PARS      (  32)                   ( -5) ( +8)

REGION  01  STATE  22  MASSACHUSETTS                 REP ORG  001  LAB  304001

                    ----------------PROBABILITY LIMITS-----------------
 POL.CD.     AUDITS      LEVEL 1         LEVEL 2        LEVEL 3        LEVEL 4
                        LOW     UP      LOW     UP     LOW     UP     LOW     UP

C42101 CO       21      -21    +31       -8    +14      -8    +13
   PARS      (  18)   ( -6) ( +6)     ( -5) ( +5)    ( -7) ( +7)

I12128 LEAD     12      -19     +0      -24    +26     -42    +18
   PARS      (   7)                   (-16) ( +8)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

               COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                 DATA SELECTED FOR YEAR 1982

REGION  01  STATE  30  NEW HAMPSHIRE                REP ORG  001  LAB  302001

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                       LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42101 CO       18      -11     +7      -2     +6      -2     +4
   PARS      (  22)  ( -8) ( +5)   ( -7) ( +6)   ( -7) ( +6)

I11101 HIV      14     TOTAL            -7     +3
   PARS      (  32)                 ( -6) ( +6)

REGION  01  STATE  41  RHODE ISLAND                 REP ORG  001  LAB  305001

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                       LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42101 CO       15       -4     +2      -1     +4      -3     +1
   PARS      (  11)  ( -3) ( +3)   ( -1) ( +4)   ( -2) ( +3)

I12128 LEAD     12       -8    +10      -9     +9      -5     +1
   PARS      (  23)  (-11) ( +5)   ( -9) ( +1)

I11101 HIV       6     TOTAL            -5     +1
   PARS      (  17)                 ( -6) ( +6)

REGION  01  STATE  47  VERMONT                      REP ORG  001  LAB  303001

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                       LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42101 CO        9       -7     -2      -2     +0      -4     -1
   PARS      (   3)  (-15) (+17)   (-12) (+16)   (-10) (+15)

I11101 HIV      23     TOTAL            -5     +3
   PARS      (  28)                 ( -6) ( +4)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  02  STATE  31  NEW JERSEY                  REP ORG  001  LAB  308001

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                     LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42101 CO      78     -6     +5      -3     +3      -4     +3
   PARS     (   8)  ( -7) ( +7)    ( -5) ( +2)    ( -5) ( +1)

I11101 HIV     37    TOTAL           -5     +8
   PARS     (  12)                 ( -3) ( +2)

REGION  02  STATE  33  NEW YORK                    REP ORG  001  LAB  307001

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                     LOW     UP      LOW     UP      LOW     UP      LOW     UP

I11101 HIV     83    TOTAL          -11    +21
   PARS     (  38)                 ( -2) ( +5)

REGION  02  STATE  33  NEW YORK                    REP ORG  001  LAB  407008

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                     LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42101 CO     123    -12     +4      -4     +6      -5     +6
   PARS     (  28)  (-10) ( +9)    ( -4) ( +6)    ( -1) ( +2)

I12128 LEAD    24    -12    +16     -20    +13     -34    +16
   PARS     (   4)  (-25) (+27)    ( -9) (+18)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

               COMPARISON REPORT OF SADHS ACCURACY AUDITS & PARS
DATE   1/04/85                     DATA SELECTED FOR YEAR 1982

REGION  02  STATE  40  PUERTO RICO                  REP ORG  001  LAB  309001

                       ---------------PROBABILITY LIMITS---------------

 POL.CD.      AUDITS       LEVEL 1          LEVEL 2          LEVEL 3         LEVEL 4
                          LOW     UP       LOW     UP       LOW     UP      LOW     UP

C42101 CO        6         +1    +13        +7     +7        +1     +9
   PARS       (    2)   ( -1) ( -1)      ( -4) ( +0)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85             DATA SELECTED FOR YEAR 1982

REGION  03  STATE  08  DELAWARE                     REP ORG  001  LAB  313002

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      12       -5    +3      -1    +4      -1    +3
   PARS      (  11)   (-12) ( +9)   ( -4) ( +7)   ( -5) ( +8)

I12128 LEAD    12      -37   +12     -24   +10     -28    +6
   PARS      (   7)   (-16) (+13)   ( -5) ( +4)

REGION  03  STATE  21  MARYLAND                     REP ORG  001  LAB  312001

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV    152      TOTAL          -6    +8
   PARS      (  56)                 ( -9) ( +9)

REGION  03  STATE  21  MARYLAND                     REP ORG  002  LAB  312001

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV    152      TOTAL          -6    +8
   PARS      (  12)                 (-13) (+10)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

             COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85              DATA SELECTED FOR YEAR 1982

REGION  03  STATE  21  MARYLAND                     REP ORG  003  LAB  412004

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV      14     TOTAL          +28   +88
   PARS      (  13)                  (-15) (+18)

REGION  03  STATE  21  MARYLAND                     REP ORG  005  LAB  412002

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV      16     TOTAL          -10   +18
   PARS      (  11)                  (-10) (+11)

REGION  03  STATE  21  MARYLAND                     REP ORG  006  LAB  412006

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV      20     TOTAL           -7   +15
   PARS      (  12)                  ( -6) ( +7)

REGION  03  STATE  39  PENNSYLVANIA                 REP ORG  001  LAB  311002

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV       5     TOTAL           -3    +3
   PARS      ( 121)                  ( -9) (+12)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

               COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                DATA SELECTED FOR YEAR 1982

REGION  03  STATE  39  PENNSYLVANIA                  REP ORG  002  LAB  411002

                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42101 CO        9       -6     +4       -2     +2       -1     +1
   PARS      (  34)   (-13) ( +9)    ( -6) ( +2)    ( -4) ( +1)

I11101 HIV      18      TOTAL            -7     +4
   PARS      ( 212)                  ( -4) ( +5)

REGION  03  STATE  39  PENNSYLVANIA                  REP ORG  003  LAB  411001

                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42101 CO       39      -12     +9       -1     +7       -2     +6
   PARS      (   6)   ( -8) ( +7)    ( -1) ( +2)    ( -1) ( +1)

I11101 HIV      13      TOTAL            -3    +21
   PARS      (  12)                  (-11) ( +8)

REGION  03  STATE  48  VIRGINIA                      REP ORG  001  LAB  315001

                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42101 CO       36       -2     +1       -4     +3       -1     +0
   PARS      (   9)   (-14) ( +9)    (-11) ( +5)    (-11) ( +6)

I12128 LEAD     11      -52    +19       -3     +4       -4     +1
   PARS      (   6)   (-12) ( +9)    ( -9) ( +4)

I11101 HIV      51      TOTAL            -9     +4
   PARS      (  51)                  ( -5) ( +3)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

              COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85               DATA SELECTED FOR YEAR 1982

REGION  03  STATE  48  VIRGINIA                      REP ORG  002  LAB  415005

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW     UP     LOW     UP     LOW     UP     LOW     UP

I11101 HIV      12      TOTAL          -4     +8
   PARS      (    9)                ( -4) (+12)

REGION  03  STATE  48  VIRGINIA                      REP ORG  003  LAB  415004

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42101 CO       21      -4     +8     +0     +7     -1     +7
   PARS      (   13) ( -4) ( +7)  ( -7) ( +6)  ( -7) ( +5)

I42602 NO2       9      -4     +3     -4     +2     -4     +5     -2     -2
   PARS      (   28) ( -5) ( +5)  ( -3) ( +5)  ( -3) ( +5)

I12128 LEAD      6     -26    -26     -2    +46     -2     -1
   PARS      (   16) ( -8) ( +5)  ( -3) ( +3)

I11101 HIV      13      TOTAL          +5     +6
   PARS      (   23)                ( -7) ( +5)

REGION  03  STATE  48  VIRGINIA                      REP ORG  005  LAB  415001

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW     UP     LOW     UP     LOW     UP     LOW     UP

I11101 HIV       5      TOTAL         -13     +7
   PARS      (    9)                ( -1) ( +1)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM
                  COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                     DATA SELECTED FOR YEAR 1982
REGION  03  STATE  50  WEST VIRGINIA                 REP ORG  001  LAB  314001
                          ---------------PROBABILITY LIMITS----------------
 POL.CD.    AUDITS     LEVEL 1         LEVEL 2        LEVEL 3         LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP
C42101 CO       6     -34    +7       -3    -3       -3    +0
   PARS     (   1)
I11101 HIV     30     TOTAL          -10   +11
   PARS     (  12)                  (-12) ( +6)
REGION  03  STATE  50  WEST VIRGINIA                 REP ORG  002  LAB  314002
                          ---------------PROBABILITY LIMITS----------------
 POL.CD.    AUDITS     LEVEL 1         LEVEL 2        LEVEL 3         LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP
I11101 HIV     16     TOTAL          -12   +20
   PARS     (  10)                  ( -4) ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85               DATA SELECTED FOR YEAR 1982

REGION  04  STATE  01  ALABAMA                    REP ORG  011  LAB  319001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                    LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV     15     TOTAL          -8    +2
   PARS     (  40)                ( -9) (+14)

REGION  04  STATE  01  ALABAMA                    REP ORG  012  LAB  419001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                    LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      21    -12   +10     -3    +6     -2    +4
   PARS     (  13)  (-30) (+23)  ( -3) ( +4)  ( -5) (+11)

I11101 HIV     12     TOTAL          +4    +8
   PARS     ( 298)                ( -4) ( +4)

REGION  04  STATE  01  ALABAMA                    REP ORG  014  LAB  419004

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                    LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV      6     TOTAL          +1    +5
   PARS     (   8)                ( -4) ( +6)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                 COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  04  STATE  01  ALABAMA                      REP ORG  015  LAB  419005

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2         LEVEL 3        LEVEL 4
                       LOW    UP     LOW     UP      LOW     UP     LOW     UP

I11101 HIV      6      TOTAL          -22    +13
   PARS     (  12)                  (-14) (+20)

REGION  04  STATE  10  FLORIDA                      REP ORG  001  LAB  323005

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2         LEVEL 3        LEVEL 4
                       LOW    UP     LOW     UP      LOW     UP     LOW     UP

I42602 NO2     10       -5    +10     -4     +6       -2     +4      -2     +3
   PARS     (  12)   ( -3) ( +5)   ( -1) ( +5)    ( -2) ( +6)

I42401 SO2     10      -21    +39    +15    +15       -5     -5      -7    +12
   PARS     (  12)   (-11) ( +8)   ( -7) ( +4)    ( -6) ( +4)

I11101 HIV     36      TOTAL          -12     +6
   PARS     (  38)                 ( -7) ( +4)

REGION  04  STATE  10  FLORIDA                      REP ORG  002  LAB  323003

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2         LEVEL 3        LEVEL 4
                       LOW    UP     LOW     UP      LOW     UP     LOW     UP

I11101 HIV     22      TOTAL          -19    +12
   PARS     (   5)                 ( -3) ( +4)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                 COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                   DATA SELECTED FOR YEAR 1982

REGION  04  STATE  10  FLORIDA                          REP ORG  003  LAB  323004

                          ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

I42401 SO2      5       -1   +16                      -3    -3       -4    +5
   PARS     (   4)   ( -2) ( +4)   ( -2) ( +5)   ( -2) ( +5)

I11101 HIV     23      TOTAL          -15    +3
   PARS     (  15)                 (-14) ( +7)

REGION  04  STATE  10  FLORIDA                          REP ORG  004  LAB  323008

                          ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

I42602 NO2     10      -97   +49      -71   +39      -86   +21      -92   +42
   PARS     (  11)   ( -3) (+12)   ( -2) (+10)   ( +0) ( +7)

I42401 SO2     10      -12   +27       -6    -6       -7    -7       -6    -1
   PARS     (  12)   (-13) ( +9)   (-11) (+11)   ( -7) ( +6)

I11101 HIV     20      TOTAL          -10    +3
   PARS     (  10)                 ( -6) ( +4)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF ΩADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  04  STATE  10  FLORIDA                   REP ORG  005  LAB  323002

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP      LOW    UP

I42602 NO2      4      +5    +5      +2    +2      +3    +3      +1     +1
   PARS     (   8)   ( -4) ( +8)   ( -7) ( +7)   ( -6) ( +8)

I42401 SO2      5      -9    +3                   -13   -13     -16     +1
   PARS     (   8)   ( -6) (+11)   ( -9) ( +9)   (-13) (+11)

I11101 HIV     13     TOTAL         -10    +2
   PARS     (  17)                 (-13) (+10)

REGION  04  STATE  10  FLORIDA                   REP ORG  006  LAB  323006

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP      LOW    UP

I42602 NO2      5      +4    +4      +3    +3      +3    +3      +3     +3
   PARS     (  11)   ( -3) ( +6)   ( -4) ( +4)   ( -5) ( +5)

I42401 SO2     10     -33   +11      -1    -1     -11   -11     -19     -7
   PARS     (  11)   (-22) (+18)   (-31) (+22)   (-17) ( +8)

I11101 HIV     32     TOTAL          -9    +7
   PARS     (  12)                 ( -4) ( +8)

REGION  04  STATE  10  FLORIDA                   REP ORG  007  LAB  323010

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP      LOW    UP

I11101 HIV      5     TOTAL          -4    +2
   PARS     (   4)                 ( -3) ( +2)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

              COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                DATA SELECTED FOR YEAR 1982

REGION  04  STATE  10  FLORIDA                  REP ORG  011  LAB  423003

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW   UP      LOW   UP      LOW   UP      LOW   UP

C42101 CO       27      -8    +3      -4    +2      -3    +2
   PARS     (   24)  ( -4) ( +7)   ( -2) ( +3)   ( -3) ( +3)

I11101 HIV      59     TOTAL          -9    +4
   PARS     (   80)                (-10) ( +9)

REGION  04  STATE  10  FLORIDA                  REP ORG  012  LAB  423004

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW   UP      LOW   UP      LOW   UP      LOW   UP

C42101 CO       12     -19   +13     -13    -1     -13    +0
   PARS     (    5)  (-12) (+12)   (-10) (+13)   ( -5) (+11)

I42602 NO2       5      -4    -4      -6    +0      -4    -4      -5    -5
   PARS     (   25)  ( -4) ( +4)   ( -3) ( +4)   ( -4) ( +5)

I42401 SO2      10      -1   +10      -1    -1      +0    +0      -2    +4
   PARS     (   28)  (-11) ( +7)   ( -7) ( +6)   ( -6) ( +3)

I12128 LEAD      6      -2    -2      -8    -3      -7    -6
   PARS     (   14)  ( -7) ( +7)   ( -4) ( +2)

I11101 HIV      38     TOTAL         -12   +22
   PARS     (   22)                (-10) (+14)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

         COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85               DATA SELECTED FOR YEAR 1982

REGION  04  STATE  10  FLORIDA                     REP ORG  013  LAB  423016

                        ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO       30       -9    +2       -6    +4       -3    +2
   PARS     (  22)    ( -7) ( +8)    ( -4) ( +6)    ( -3) ( +3)

I42401 SO2      10      -66    +3      -22   -22       -7    -7      -13    +8
   PARS     (  10)    ( -8) (+18)    ( -6) (+11)    ( -8) (+17)

I12128 LEAD     12       -8   +12       -6    +2       -4    +4
   PARS     (   9)    ( -1) ( +7)    ( -4) ( +8)

I11101 HIV      31      TOTAL          -14    -1
   PARS     (  29)                   ( -2) ( +1)

REGION  04  STATE  10  FLORIDA                     REP ORG  014  LAB  423005

                        ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

I42401 SO2      10      -18   +12       +6    +6       -4    -4       -4   +11
   PARS     (  35)    (-22) (+11)    (-10) ( +6)    ( -7) ( +5)

I11101 HIV      19      TOTAL           -6    +8
   PARS     (  14)                   (-16) (+19)

REGION  04  STATE  10  FLORIDA                     REP ORG  015  LAB  423015

                        ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV      15      TOTAL          -29   +14
   PARS     (   5)                   (-27) (+18)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

           COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                    DATA SELECTED FOR YEAR 1982

REGION  04  STATE  10  FLORIDA                  REP ORG  016  LAB  423008

                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                      LOW     UP      LOW     UP      LOW      UP     LOW     UP

C42101 CO       6      -16    +6       -1     +0       -4     +2
   PARS     (   4)   ( +1) (+11)    ( +3) ( +9)    ( -1) ( +5)

REGION  04  STATE  10  FLORIDA                  REP ORG  017  LAB  423001

                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                      LOW     UP      LOW     UP      LOW      UP     LOW     UP

C42101 CO      30      -11    +6       -2     +1       -2     +1
   PARS     (   4)   ( -8) (+17)    ( -1) ( +9)    ( -1) ( +4)

I42602 NO2     10       +0    +3       -4     -2       -5     +2       -3     -1
   PARS     (  58)   ( -8) (+10)    ( -4) ( +5)    ( -6) ( +5)

I42401 SO2     10      -39   +16      -10    -10      -13    -13      -11     +1
   PARS     (  42)   (-26) ( +2)    (-17) ( +1)    (-14) ( +2)

I11101 HIV     30     TOTAL            -7     +4
   PARS     (  12)                  ( -5) ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

              COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                 DATA SELECTED FOR YEAR 1982

REGION  04  STATE  10  FLORIDA                      REP ORG  018  LAB  423002

                 ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                       LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42101 CO       21     -13     +1       -3     +3       -1     +2
   PARS     (    4)  ( -7) (+12)    ( +0) ( +3)     ( -1) ( +2)

I12128 LEAD      6      +3     +3       +2     +5       -1     +4
   PARS     (    6)  ( -2) ( +2)    ( -6) ( +1)

I11101 HIV      17     TOTAL            -8     +4
   PARS     (   90)                 ( -8) ( +8)

REGION  04  STATE  11  GEORGIA                      REP ORG  010  LAB  321001

                 ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                       LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42101 CO       18     -10    +14       -3     +7       -3     +4
   PARS     (    9)  (-40) (+31)    (-20) (+26)     (-16) (+23)

I11101 HIV      32     TOTAL            -3     +4
   PARS     (   52)                 ( -5) ( +4)

REGION  04  STATE  18  KENTUCKY                     REP ORG  001  LAB  316001

                 ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                       LOW     UP      LOW     UP      LOW     UP      LOW     UP

I11101 HIV      10     TOTAL            -5    +24
   PARS     (   85)                 (-12) (+18)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

              COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  04  STATE  18  KENTUCKY                      REP ORG  001  LAB  316007

                            ---------------PROBABILITY LIMITS----------------

POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO     36       -16   +11      -5    +3      -4    +5
  PARS      (  25)    (-13) (+12)   ( -8) ( +6)   (-12) ( +9)

I12128 LEAD   12       -28   +29     -19   +19     -14   +19
  PARS      (   6)    ( -2) (+26)   ( +0) ( +9)

REGION  04  STATE  18  KENTUCKY                      REP ORG  002  LAB  416001

                            ---------------PROBABILITY LIMITS----------------

POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO     24       -16    +7     -14   +16     -13   +12
  PARS      (   4)    ( -9) ( +3)   ( -7) ( +6)   ( -3) ( +7)

I42602 NO2    10       -39   +19     -25    +6     -18    +7     -17    +3
  PARS      (  56)    (-29) (+26)   (-19) (+18)   (-12) ( +6)

I42401 SO2    10       -25   +18      +6    +6     -11   -11     -13   +14
  PARS      (  58)    (-11) (+12)   ( -4) ( +5)   ( -3) ( +4)

I12128 LEAD   12       -17    +5     -12    +4     -15    -4
  PARS      (   3)                  ( -1) (+11)

I11101 HIV    13       TOTAL          -4    +4
  PARS      (  21)                  ( -5) ( +5)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85             DATA SELECTED FOR YEAR 1982

REGION  04  STATE  25  MISSISSIPPI               REP ORG  100  LAB  322002

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO        6      -11    +7      -4     +6      -4     +3
   PARS      (   4)   ( -3) ( +6)   ( -1) ( +4)   ( -5) ( +2)

I11101 HIV      12      TOTAL          -12    +11
   PARS      (  27)                 (-10) (+10)

REGION  04  STATE  34  NORTH CAROLINA            REP ORG  001  LAB  318001

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV      65      TOTAL           -9     +9
   PARS      ( 256)                 ( -4) ( +3)

REGION  04  STATE  34  NORTH CAROLINA            REP ORG  001  LAB  318004

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO       12      -16    +9      -5     +3      -4     +1
   PARS      (   5)   (-23) (+21)   ( -6) ( +6)   ( -7) ( +7)

I42602 NO2       4                     +2     +2      +1     +2      +2     +2
   PARS      (  17)   ( -6) ( +3)   ( -6) ( +2)   ( -4) ( +0)

I42401 SO2       5      -11    +8                     -6     -6      -2     +3
   PARS      (  20)   (-10) ( +6)   (-11) ( +0)   (-18) ( +4)

I12128 LEAD     12      -26   +40      -6    +12     -12     +5
   PARS      (   5)   ( -4) (+10)   ( +0) ( +0)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM
            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85              DATA SELECTED FOR YEAR 1982

REGION  04  STATE  34  NORTH CAROLINA            REP ORG  002  LAB  418003

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO       12    -13    +3      -8    -2      -9    +0
   PARS     (    7)  (-25) ( +8)   (-11) (+14)   (-11) (+15)

I42602 NO2       5    +2     +2      +2    +2      -1    +0      -4    -4
   PARS     (   50)  (-14) (+13)   (-16) (+14)   (-13) (+13)

I42401 SO2       5    -7     +1                    +1    +1      +0    +2
   PARS     (   36)  (-30) (+19)   (-21) (+13)   (-18) (+12)

REGION  04  STATE  34  NORTH CAROLINA            REP ORG  003  LAB  418006

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO       30    -8     +3      -2    +6      -2    +2
   PARS     (   59)  ( -6) ( +4)   ( -2) ( +3)   ( -2) ( +3)

I42602 NO2      10    -8    +11      -6    +6      -4    +7      -6    +8
   PARS     (   57)  ( -5) ( +8)   ( -1) ( +6)   ( -1) ( +5)

I42401 SO2       5    -32   -14                    -7    -7      -3    -2
   PARS     (   58)  (-15) ( +3)   ( -8) ( +5)   ( -6) ( +6)

I11101 HIV      61    TOTAL          -3    +8
   PARS     (   59)                ( -5) ( +9)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85              DATA SELECTED FOR YEAR 1982

REGION  04  STATE  34  NORTH CAROLINA            REP ORG  004  LAB  418008

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

I42602 NO2     10     -17   +10     -10    -3      -8    -4      -8    -2
   PARS     (  12)   (-11) (+15)   (-15) (+11)   (-16) (+14)

I42401 SO2      5     -29   +12                   -11   -11     -15    +1
   PARS     (   6)   (-19) ( +8)   (-17) (+22)   (-11) (+15)

I11101 HIV      9     TOTAL          -3    +6
   PARS     (  10)                 ( -4) (+17)

REGION  04  STATE  42  SOUTH CAROLINA            REP ORG  001  LAB  320001

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      21     -18    +9      -6    +3      -3    +2
   PARS     (  39)   (-26) (+10)   ( -5) ( +4)   ( -2) ( +3)

I12128 LEAD    12      -7    +3      -2    +2      -5    +1
   PARS     (  18)   ( -8) (+18)   (-19) (+21)

I11101 HIV     11     TOTAL          +0    +1
   PARS     ( 355)                 ( -3) ( +3)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE   1/04/85               DATA SELECTED FOR YEAR 1982

REGION  04  STATE  44  TENNESSEE                    REP ORG  002  LAB  417004

                        ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      27      -6     +7      +0     +4      +0     +2
   PARS     (  29)   ( -5) ( +6)   ( -4) ( +7)   ( -5) ( +7)

I11101 HIV      8     TOTAL           -2     +0
   PARS     (  55)                 ( -9) ( +9)

REGION  04  STATE  44  TENNESSEE                    REP ORG  003  LAB  417003

                        ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      30      +1     +2      +1     +2      -1     +1
   PARS     (  26)   (-14) ( +6)   (-12) ( +7)   (-16) (+10)

I42602 NO2     10      +1     +1      -5    +10      -2     +1      -2     -1
   PARS     (  29)   ( -5) ( +6)   ( -4) ( +3)   ( -4) ( +4)

I12128 LEAD    12     -34    +68     -46    +83     -10    +12
   PARS     (  60)   ( -4) ( +3)   ( -4) ( +1)

I11101 HIV     29     TOTAL           -5     +9
   PARS     (  90)                 ( -5) (+10)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                    DATA SELECTED FOR YEAR 1982

REGION  04  STATE  44  TENNESSEE                 REP ORG  004  LAB  417002

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                     LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42101 CO       3      -8     -8     +0     +0     +0     +0
  PARS      (   2)  (-11) (+21)  (-11) (+17)  (-11) (+17)

I11101 HIV     15     TOTAL          -3     +6
  PARS      (  44)                ( -5) ( +4)

REGION  04  STATE  44  TENNESSEE                 REP ORG  005  LAB  417001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                     LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42101 CO       6     -11     -1     -5     +1     -3     +0
  PARS      (   9)  ( -9) ( +7)  ( -4) ( +4)  ( -9) ( +6)

I11101 HIV     26     TOTAL          -6    +11
  PARS      ( 100)                ( -6) ( +6)

REGION  04  STATE  44  TENNESSEE                 REP ORG  006  LAB  417001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                     LOW     UP     LOW     UP     LOW     UP     LOW     UP

I11101 HIV     26     TOTAL          -6    +11
  PARS      (  35)                (-10) (+13)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM
             COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85               DATA SELECTED FOR YEAR 1982

REGION  05  STATE  14  ILLINOIS                        REP ORG  001  LAB  328001

                     ----------------PROBABILITY LIMITS-----------------
 POL.CD.    AUDITS      LEVEL 1         LEVEL 2         LEVEL 3        LEVEL 4
                      LOW     UP      LOW     UP      LOW     UP     LOW     UP

C42101 CO       51     -15    +7       -7    +7       -6    +5
   PARS      (   9)  (-11) ( +8)   ( -9) ( +5)    ( -1) ( +3)

I12128 LEAD     12      -6    +2       -4    +1      -12    +4
   PARS      (   3)  ( -3) ( +5)   ( -1) ( +3)

I11101 HIV       4    TOTAL           -13    +2
   PARS      (  57)                (-12) (+10)

REGION  05  STATE  14  ILLINOIS                        REP ORG  002  LAB  428002

                     ----------------PROBABILITY LIMITS-----------------
 POL.CD.    AUDITS      LEVEL 1         LEVEL 2         LEVEL 3        LEVEL 4
                      LOW     UP      LOW     UP      LOW     UP     LOW     UP

I12128 LEAD     12      -3   +12      -13    +9      -29   +13
   PARS      (   3)  ( -4) ( +4)   ( -9) ( +7)

I11101 HIV      17    TOTAL           -11    +3
   PARS      (  20)                ( -9) ( +6)

REGION  05  STATE  14  ILLINOIS                        REP ORG  003  LAB  428003

                     ----------------PROBABILITY LIMITS-----------------
 POL.CD.    AUDITS      LEVEL 1         LEVEL 2         LEVEL 3        LEVEL 4
                      LOW     UP      LOW     UP      LOW     UP     LOW     UP

C42101 CO       18      -8    +4       -2    +4       -2    +3
   PARS      (  11)  (-20) ( +7)   ( -6) ( +5)    ( -9) ( +4)

I11101 HIV       9    TOTAL           -10    +5
   PARS      (  30)                ( -8) ( +9)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                 DATA SELECTED FOR YEAR 1982

REGION  05  STATE  15  INDIANA                       REP ORG  001  LAB  329001

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV     5      TOTAL          -10    +2
   PARS     (  38)                 ( -4) ( +5)

REGION  05  STATE  15  INDIANA                       REP ORG  001  LAB  329002

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      6      -31   -29     -41    +5      -9    +4
   PARS     (   5)   (-31) (+35)   ( -8) (+16)   ( -3) ( +6)

REGION  05  STATE  15  INDIANA                       REP ORG  002  LAB  429002

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV     6      TOTAL           -1   +10
   PARS     (   2)                 ( -1) ( +3)

REGION  05  STATE  15  INDIANA                       REP ORG  003  LAB  429007

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV    26      TOTAL           -7    +3
   PARS     (  32)                 ( -6) ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

        COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85             DATA SELECTED FOR YEAR 1982

REGION  05  STATE  15  INDIANA                  REP ORG  005  LAB  429005

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV     23      TOTAL           -3    +6
   PARS     (  14)                  ( -1) (+10)

REGION  05  STATE  15  INDIANA                  REP ORG  008  LAB  429004

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV      5      TOTAL           +0    +9
   PARS     (  16)                  ( -1) ( +1)

REGION  05  STATE  15  INDIANA                  REP ORG  009  LAB  429008

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV     15      TOTAL           -5    +0
   PARS     (   8)                  ( -4) ( +4)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85              DATA SELECTED FOR YEAR 1982

REGION  05  STATE  23  MICHIGAN                   REP ORG  001  LAB  326001

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42101 CO       24      -11    +7        -9    +8       -10    +7
   PARS      (   6)   ( -9) (+10)     ( -7) ( +6)     ( -8) ( +4)

I12128 LEAD     12      -93   +20       -78   +31       -83   +30
   PARS      (  14)   ( -8) ( +0)     ( -8) ( +0)

I11101 HIV      12      TOTAL            -2   +11
   PARS      (  35)                   ( -4) ( +8)

REGION  05  STATE  23  MICHIGAN                   REP ORG  002  LAB  426001

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42101 CO       30      -26   +14        -6   +10        -5    +8
   PARS      (   4)   (-11) ( +6)     ( +1) ( +4)     ( -1) ( +6)

I12128 LEAD     12       -9   +76       -10   +14        -4    +6
   PARS      (   3)   ( -2) ( +2)     ( -2) ( +2)

I11101 HIV      54      TOTAL            -9    +5
   PARS      (  24)                   ( -5) ( +5)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85               DATA SELECTED FOR YEAR 1982

REGION  05  STATE  24  MINNESOTA                 REP ORG  001  LAB  324001

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      37     -18    +5      -5    +6      -5    +6
   PARS     (  23)   (-17) (+23)   ( -8) (+14)   ( -8) ( +9)

I12128 LEAD    12     -10    +6      -2    +1      -3    +2
   PARS     (   8)   (-20) ( +9)   (-17) ( +8)

I11101 HIV     29     TOTAL         -20   +14
   PARS     (  70)                 ( -7) ( +9)

REGION  05  STATE  36  OHIO                      REP ORG  001  LAB  327001

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      18      -3   +13      +5   +13      +3    +9
   PARS     (   4)   ( -3) (+13)   ( +5) ( +7)   ( +4) (+11)

I12128 LEAD    12     -36   +29     -19    +8     -11    +5
   PARS     (  22)   (-18) (+13)   ( -8) ( +6)

REGION  05  STATE  36  OHIO                      REP ORG  002  LAB  327003

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV     31     TOTAL          -7    +0
   PARS     (  12)                 (-11) ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                 COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  05  STATE  36  OHIO                          REP ORG  003  LAB  327005

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV     18       TOTAL           -6    +0
   PARS     (  23)                   (-10) ( +4)

REGION  05  STATE  36  OHIO                          REP ORG  005  LAB  327006

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV     21       TOTAL           -7    +3
   PARS     (  10)                   ( -9) ( +3)

REGION  05  STATE  36  OHIO                          REP ORG  006  LAB  427001

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO       6       -21   +43      -5   +19      -9   +15
   PARS     (   5)    (-21) (+15)   (-13) ( +5)   (-18) (+10)

I11101 HIV     46       TOTAL           -5    +4
   PARS     (  17)                   ( -5) ( +8)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                DATA SELECTED FOR YEAR 1982

REGION  05   STATE  36  OHIO                         REP ORG  007  LAB  427002

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV     28      TOTAL          +0    +4
   PARS     (  19)                 ( -3) ( +6)

REGION  05   STATE  36  OHIO                         REP ORG  008  LAB  427003

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      30      -22    +9      -3    +3      -3    +3
   PARS     (   4)   (-15) ( -3)   ( -4) ( +3)   ( -4) ( +6)

I12128 LEAD     6       -2    -2      -5    -2      -5    -4
   PARS     (  22)   (-18) (+13)   ( -8) ( +6)

I11101 HIV     31      TOTAL          -6    +8
   PARS     (  40)                 ( -8) ( +6)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

             COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85             DATA SELECTED FOR YEAR 1982

REGION  05  STATE  36  OHIO                         REP ORG  009  LAB  427004

                          ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO       12      -19   +10      -3    +3       -4    +2
   PARS     (    5)   (-13) ( +6)   (-12) ( +4)    (-11) ( +3)

I42602 NO2      10      -12   +21      -7   +10       -3    +7       -6    +7
   PARS     (   44)   ( -4) ( +6)   ( -3) ( +5)    ( -4) ( +5)

I42401 SO2      10      -11   +15      +3    +3       -4    -4       -1    +7
   PARS     (   46)   (-10) ( +4)   ( -5) ( +4)    ( -4) ( +4)

I11101 HIV      26      TOTAL          -7    +4
   PARS     (   39)                 ( -4) ( +6)

REGION  05  STATE  36  OHIO                         REP ORG  010  LAB  427005

                          ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO        9      -33   +16      -2    +6       -7    +4
   PARS     (    4)   (-47) (+19)   (-17) (+15)    ( -7) (+11)

I11101 HIV       6      TOTAL          -6   +10
   PARS     (   29)                 ( -8) ( +9)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                     DATA SELECTED FOR YEAR 1982

REGION  05  STATE  36  OHIO                         REP ORG  012  LAB  427007

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2         LEVEL 3          LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP        LOW    UP

C42101 CO        6      -11    -2       -1    +0        -5    +6
   PARS     (    2)   ( +5) ( +5)     ( +1) ( +9)     ( -1) (+11)

I42602 NO2      10      +1     +1       -2    +1        -3    +1         -2    +0
   PARS     (   59)   ( -8) ( +5)     ( -3) ( +3)     ( -3) ( +5)

I42401 SO2      10      -33   +19       +8    +8        -6    -6         -7    +4
   PARS     (   59)   ( -7) ( +5)     ( -5) ( +4)     ( -3) ( +3)

I11101 HIV      43      TOTAL           -8    +4
   PARS     (   17)                   (-11) ( +8)

REGION  05  STATE  36  OHIO                         REP ORG  013  LAB  427010

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2         LEVEL 3          LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP        LOW    UP

I11101 HIV      17      TOTAL          -14    +9
   PARS     (   20)                   ( -6) ( +5)

REGION  05  STATE  36  OHIO                         REP ORG  014  LAB  427008

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2         LEVEL 3          LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP        LOW    UP

C42101 CO        6      +1     +2       +1    +3        -1    +0
   PARS     (    2)   (-11) ( +5)     ( -9) ( +7)     ( -8) ( +4)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                 DATA SELECTED FOR YEAR 1982

REGION  05  STATE  36  OHIO                        REP ORG  015  LAB  427009

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      12      -12    +4      -2     -1      -2     +0
   PARS     (   2)    ( -3) ( +5)   ( -5) (+11)    ( -3) ( +9)

I11101 HIV     14      TOTAL          -7    +11
   PARS     (  18)                  ( +3) (+14)

REGION  05  STATE  36  OHIO                        REP ORG  016  LAB  427012

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV     28      TOTAL          -4     +5
   PARS     (  24)                  ( -5) ( +3)

REGION  05  STATE  51  WISCONSIN                   REP ORG  001  LAB  325001

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV     37      TOTAL          -3     +6
   PARS     (  16)                  ( -4) ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  05  STATE  51  WISCONSIN                    REP ORG  001  LAB  325002

                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.      AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                         LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42101 CO       54       -11   +13       -2     +9       -3     +7
  PARS       (   5)    ( -1) (+19)     ( -4) ( +9)     ( -3) ( +4)

I12128 LEAD      6        -3    -3       -4     -2       -6     -4
  PARS       (  27)    (-16) ( +8)     (-18) ( +9)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

             COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85               DATA SELECTED FOR YEAR 1982

REGION  06   STATE  04  ARKANSAS                  REP ORG  001  LAB  332001
                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO       6       -10    -4      -12    +4      -12    +1
  PARS       (   1)

REGION  06   STATE  04  ARKANSAS                  REP ORG  002  LAB  332001
                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV     11       TOTAL          -10   +12
  PARS       ( 105)                  ( -6) ( +5)

REGION  06   STATE  19  LOUISIANA                 REP ORG  001  LAB  334001
                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      12       -34    +6      -19    +9      -19    +7
  PARS       (   3)    (-14) ( +2)    (-12) ( +4)    (-19) ( +9)

I11101 HIV     21       TOTAL           -8    +7
  PARS       ( 144)                  ( -6) ( +4)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE   1/04/85                DATA SELECTED FOR YEAR 1982

REGION  06  STATE  32  NEW MEXICO                 REP ORG  001  LAB  330001

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW     UP     LOW     UP     LOW     UP     LOW     UP

I12128 LEAD     12     -11     +8     -5     -3     -6     +0
   PARS      (  34)  (-14) ( +5)  (-10) ( +7)

I11101 HIV       8     TOTAL          -5    +19
   PARS      ( 257)                ( -5) ( +5)

REGION  06  STATE  32  NEW MEXICO                 REP ORG  002  LAB  430001

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42101 CO        6      -3     +3     -3    +10     -1     +3
   PARS      (  30)  ( -6) ( +5)  ( -4) ( +6)  ( -7) ( +7)  ( -5) ( +6)

I11101 HIV       6     TOTAL          -8    +28
   PARS      (  23)                ( -7) ( +6)

REGION  06  STATE  37  OKLAHOMA                   REP ORG  101  LAB  331002

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42101 CO        9     -44    +19    -40    +18    -40    +15
   PARS      (   3)  (-38) (+16)  (-40) ( -5)  (-52) ( -5)

I11101 HIV       3     TOTAL         -24    +29
   PARS      (  20)                ( -6) ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE   1/04/85                 DATA SELECTED FOR YEAR 1982

REGION  06   STATE  37  OKLAHOMA                     REP ORG  102  LAB  431001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV     21       TOTAL          -17    +5
   PARS     (  12)                   ( -5) ( +4)

REGION  06   STATE  37  OKLAHOMA                     REP ORG  103  LAB  431002

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      12        -5    +6       -1    +2       -1    +2
   PARS     (  10)     (-10) (+15)    ( -4) ( +7)    ( -3) ( +4)

I12128 LEAD    12        -5    +5       -2    +4       -3    +2
   PARS     (  23)     ( -4) ( +2)    ( -5) ( +4)

REGION  06   STATE  45  TEXAS                        REP ORG  001  LAB  333001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      15        -8   +13       -8    +5       -8    +4
   PARS     (  43)     (-24) (+27)    (-12) (+12)    (-11) ( +9)

I11101 HIV     20       TOTAL          -13    +3
   PARS     ( 502)                   ( -6) ( +5)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                    DATA SELECTED FOR YEAR 1982

REGION  06  STATE  45  TEXAS                            REP ORG  002  LAB  433002

                        ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS       LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42101 CO        2        +0     +0       +0     +0
   PARS      (   7)    (-11) (+19)    ( -7) (+13)    (-10) (+10)

I12128 LEAD     12       -44    +46      -12    +21       -5    +10
   PARS      (  18)    (-19) ( +7)    (-15) ( +3)

I11101 HIV      39      TOTAL             -7     +4
   PARS      (  52)                   ( -9) ( +6)

REGION  06  STATE  45  TEXAS                            REP ORG  003  LAB  433001

                        ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS       LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42101 CO        6       -12     +9       +3     +7       +1     +6
   PARS      (   2)    ( -7) (+15)    ( +0) ( +0)    ( +2) ( +2)

I11101 HIV      55      TOTAL             -8     +5
   PARS      (  72)                   ( -4) ( +4)

REGION  06  STATE  45  TEXAS                            REP ORG  004  LAB  433004

                        ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS       LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

I11101 HIV       6      TOTAL            -35    +20
   PARS      (  33)                   (-15) (+19)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

           COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                DATA SELECTED FOR YEAR 1982

REGION  06  STATE  45  TEXAS                          REP ORG  005  LAB  433005

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW     UP     LOW     UP     LOW     UP     LOW     UP

I42602 NO2      5       -1     -1      -3     -3      -3     -1      -4     -4
   PARS     (  49)   ( -4) ( +8)   ( -8) ( +9)   (-12) ( +4)

I11101 HIV     19      TOTAL           -8     +2
   PARS     (  33)                 ( -6) ( +4)

REGION  06  STATE  45  TEXAS                          REP ORG  006  LAB  433008

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42101 CO      15      -17     +7      -7     +5      -3     +3
   PARS     (   2)   ( -9) ( -9)   ( -3) ( +9)   ( -4) ( +2)

I12128 LEAD     6       -4    +43      +3     +3     -35    +20
   PARS     (   6)   ( -8) ( +0)   ( -4) ( +0)

I11101 HIV     16      TOTAL           -7     +4
   PARS     (  62)                 (-10) (+14)

REGION  06  STATE  45  TEXAS                          REP ORG  007  LAB  433010

                       ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW     UP     LOW     UP     LOW     UP     LOW     UP

I11101 HIV     10      TOTAL           -3     +2
   PARS     (  39)                 ( -2) ( +2)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM
              COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85              DATA SELECTED FOR YEAR 1982
                                                  REP ORG  001  LAB  436001
REGION  07  STATE  16  IOWA
                    ---------------PROBABILITY LIMITS-----------------
                                                          
                           LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
 POL.CD.     AUDITS      LOW    UP      LOW    UP      LOW    UP      LOW    UP

                           -7     +3      -6    +11      -2     +1
C42101 CO       12       (-12) (+24)   (-11) ( +7)   (-10) ( +4)
   PARS      (   5)

I11101 HIV      30       TOTAL          -25    +12
   PARS      (  16)                    (-38) (+24)
                                                  REP ORG  002  LAB  436002
REGION  07  STATE  16  IOWA
                    ---------------PROBABILITY LIMITS-----------------
                                                          
                           LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
 POL.CD.     AUDITS      LOW    UP      LOW    UP      LOW    UP      LOW    UP

                           +2    +16      -2    +23      +1    +20
C42101 CO        6       ( -6) ( +3)   ( -7) ( +5)   ( -6) ( +4)
   PARS      (  12)

I11101 HIV      15       TOTAL           +1     +2
   PARS      (  15)                    ( -5) (+10)
                                                  REP ORG  003  LAB  336001
REGION  07  STATE  16  IOWA
                    ---------------PROBABILITY LIMITS-----------------
                                                          
                           LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
 POL.CD.     AUDITS      LOW    UP      LOW    UP      LOW    UP      LOW    UP

                                                         -5     -1
C42101 CO        6        -30    +23      -4     +3    (-22) (+13)
   PARS      (   4)      (-18) ( +0)   (-12) ( +1)

                                                         -6     +5
I12128 LEAD     12        -18    +18      -6     +9
   PARS      (  13)      ( +0) ( +0)   (-12) ( +9)

I11101 HIV      18       TOTAL           -5     +2
   PARS      (  48)                    ( -4) ( +4)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                 DATA SELECTED FOR YEAR 1982

REGION  07  STATE  17  KANSAS                    REP ORG  001  LAB  337001

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV     22      TOTAL          -15    +6
   PARS      (  33)                  (-13) (+15)

RECION  07  STATE  17  KANSAS                    REP ORG  001  LAB  437003

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      18      -16    +9      -6     +6      -3     +3
   PARS      (   7)   (-18) ( +8)   ( -4) ( +5)   ( -3) ( +2)

I12128 LEAD    12      -31    +9      -25    +2      -17    -3
   PARS      (  37)   (-24) ( +1)   (-22) ( -1)

REGION  07  STATE  26  MISSOURI                  REP ORG  001  LAB  338001

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      10       -5    -2      -3     +1      -4     -1
   PARS      (   4)   (-11) (+12)   ( -4) ( +2)   ( -3) ( +4)

I11101 HIV     47      TOTAL          -8     +4
   PARS      (  20)                 ( -7) ( +6)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85               DATA SELECTED FOR YEAR 1982

REGION  07  STATE  26  MISSOURI                  REP ORG  002  LAB  438004

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42101 CO      30       -7     +9      -4     +8      -3     +7
   PARS      (   4)   (-11) (+15)   ( -5) ( +8)   ( -2) ( +5)

I11101 HIV      8      TOTAL          -11     +7
   PARS      (  10)                 ( -6) ( +5)

REGION  07  STATE  26  MISSOURI                  REP ORG  004  LAB  438002

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW     UP     LOW     UP     LOW     UP     LOW     UP

I11101 HIV     14      TOTAL           -4     +7
   PARS      (   6)                 ( -2) ( +7)

REGION  07  STATE  26  MISSOURI                  REP ORG  004  LAB  438006

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42101 CO      15      -23     +9      -6     +1      -6     +3
   PARS      (   4)   (-17) ( +6)   ( -8) ( -4)   ( -9) ( +1)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                  COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  07  STATE  26  MISSOURI                      REP ORG  005  LAB  438005

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP     LOW     UP     LOW     UP     LOW     UP

I11101 HIV     17      TOTAL           -6     -1
   PARS      (  12)                 ( -4) ( +2)

REGION  07  STATE  28  NEBRASKA                      REP ORG  001  LAB  335001

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP     LOW     UP     LOW     UP     LOW     UP

I11101 HIV     13      TOTAL          -12     +7
   PARS      (  20)                 (-10) (+15)

REGION  07  STATE  28  NEBRASKA                      REP ORG  002  LAB  335001

                         ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP     LOW     UP     LOW     UP     LOW     UP

I11101 HIV     13      TOTAL          -12     +7
   PARS      (  11)                 ( -8) ( +8)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM
            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85              DATA SELECTED FOR YEAR 1982

REGION  07  STATE  28  NEBRASKA                  REP ORG  003  LAB  435003

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

I12128 LEAD    12      -5    +6      -8   +16      -2    +4
   PARS     (  45)   (-24) (+21)   (-13) (+15)

I11101 HIV     36     TOTAL         -13    +5
   PARS     (  20)                 ( -7) ( +4)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

              COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  08  STATE  06  COLORADO                    REP ORG  001  LAB  344001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      51     -20    +13     -11    +15     -10    +13
   PARS     (  15)   (-18) (+16)   ( -8) (+12)   ( -3) ( +7)   ( -1) ( +2)

REGION  08  STATE  27  MONTANA                     REP ORG  001  LAB  339002

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      18     -58    +47     -29    +25     -26    +22
   PARS     (   6)   ( +5) (+20)   ( +0) (+15)   ( -4) (+13)

I11101 HIV      9     TOTAL           -6     +6
   PARS     (  44)                 ( -6) ( +6)

REGION  08  STATE  27  MONTANA                     REP ORG  002  LAB  439001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV      2     TOTAL           -8     -4
   PARS     (   8)                 ( -2) ( +5)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

         COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85             DATA SELECTED FOR YEAR 1982

REGION  08  STATE  27  MONTANA                   REP ORG  003  LAB  439002

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO       6       +1    +1      -5    +9      -7    +4
   PARS     (    2)  ( -6) ( +3)   ( -5) ( +4)   ( -3) ( -3)

I11101 HIV     11      TOTAL          -2   +12
   PARS     (    4)                ( -4) ( +8)

REGION  08  STATE  27  MONTANA                   REP ORG  004  LAB  439003

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      12       -3    +7      -2    +4      -4    +8
   PARS     (    2)  ( +1) (+14)   ( +2) ( +5)   ( -2) (+11)

I11101 HIV     17      TOTAL         -15    +8
   PARS     (   14)                (-30) (+34)

REGION  08  STATE  35  NORTH DAKOTA              REP ORG  001  LAB  341001

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

I11101 HIV      6      TOTAL         -16    +7
   PARS     (   23)                ( -9) ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE   1/04/85              DATA SELECTED FOR YEAR 1982

REGION  08  STATE  43  SOUTH DAKOTA                REP ORG  001  LAB  342001
                       ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

I11101 HIV      3       TOTAL            -6     +3
   PARS      (  77)                   ( -3) ( +4)

REGION  08  STATE  46  UTAH                        REP ORG  001  LAB  340001
                       ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42101 CO      48        -7    +11       -4     +6       -3     +4
   PARS      (  24)   ( -9) ( +7)     ( -8) ( +5)     ( -7) ( +5)

I11101 HIV     20       TOTAL           -22     +5
   PARS      (  28)                   ( -4) ( +4)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

           COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                 DATA SELECTED FOR YEAR 1982

REGION  09  STATE  03  ARIZONA                    REP ORG  100  LAB  347001

                   ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      21     -15    +3     -4    +1     -2    +0
  PARS      (   9)   (-20) ( +9)  (-15) ( +7)  ( -2) ( +3)  ( -2) ( +2)

I11101 HIV      7     TOTAL         -8    +6
  PARS      (  14)                (-13) ( +7)

REGION  09  STATE  03  ARIZONA                    REP ORG  200  LAB  447001

                   ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      39     -25   +14     -7    +4     -9    +3
  PARS      (   7)   (-26) (+13)  ( -6) ( +3)  ( -4) ( +2)

I11101 HIV     32     TOTAL        -16   +13
  PARS      (  32)                (-11) ( +9)

REGION  09  STATE  03  ARIZONA                    REP ORG  300  LAB  447002

                   ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      18      -3    +9     -1    +4     -2    +2
  PARS      (   1)

I11101 HIV      9     TOTAL        -27   +39
  PARS      (  16)                (-10) (+16)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                  COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  09  STATE  05  CALIFORNIA                     REP ORG  001  LAB  345002

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV     76     TOTAL          -22   +15
   PARS     (  71)                  (-11) (+10)

REGION  09  STATE  05  CALIFORNIA                     REP ORG  001  LAB  345003

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      21     -16    +11      -4     +4      -3     +1
   PARS     (  26)   ( -7) (+10)    ( -7) ( +6)    ( -6) ( +5)    ( -2) ( +2)

REGION  09  STATE  05  CALIFORNIA                     REP ORG  001  LAB  445016

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      39     -41    +27     -11     +6      -7     +7
   PARS     (  26)   ( -7) (+10)    ( -7) ( +6)    ( -6) ( +5)    ( -2) ( +2)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                  DATA SELECTED FOR YEAR 1982

REGION  09  STATE  05  CALIFORNIA                 REP ORG  004  LAB  445001

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                     LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO       6      -9    +4      -2    +2       -2    +1
   PARS     (  33)   (-12) (+16)   ( -3) ( +3)    ( -2) ( +2)

I12128 LEAD    12     -12    +8     -18    +0       -9    +1
   PARS     (   9)   ( -7) ( +0)   ( -7) ( -4)

REGION  09  STATE  05  CALIFORNIA                 REP ORG  036  LAB  445003

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                     LOW    UP      LOW    UP      LOW    UP      LOW    UP

I11101 HIV     28    TOTAL          -20    +7
   PARS     (   7)                 (-17) ( +7)

REGION  09  STATE  05  CALIFORNIA                 REP ORG  036  LAB  445005

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                     LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      39      -9    +7      -3    +2       -3    +3
   PARS     (  10)   (-31) (+35)   ( -8) ( +8)    ( -4) ( +4)    ( -5) ( +3)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

             COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                   DATA SELECTED FOR YEAR 1982

REGION  09  STATE  05  CALIFORNIA                   REP ORG  061  LAB  445002

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                       LOW     UP       LOW     UP       LOW     UP       LOW     UP

I12128 LEAD     6       -5     +7        +1     +1        -4     +0
   PARS      (   7)  ( -6) ( +9)     ( -6) ( +7)

I11101 HIV      4      TOTAL             -3    +19
   PARS      (  30)                  (-13) (+10)

REGION  09  STATE  05  CALIFORNIA                   REP ORG  061  LAB  445018

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                       LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42101 CO      39      -10    +18        -2     +5        -5     +5
   PARS      (  24)  ( -2) (+18)     ( +1) (+11)     ( -4) ( +8)

I12128 LEAD     6       +3     +3        -3     +0        +0     +1
   PARS      (   7)  ( -6) ( +9)     ( -6) ( +7)

REGION  09  STATE  12  HAWAII                       REP ORG  120  LAB  348001

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                       LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42101 CO      12       -5    +12        +1     +7        -2     +5
   PARS      ( 137)  (-14) (+15)     ( -4) ( +4)     ( -4) ( +3)

I11101 HIV     24      TOTAL             -3     +3
   PARS      (  50)                  ( -6) ( +5)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85             DATA SELECTED FOR YEAR 1982

REGION  09  STATE  29  NEVADA                     REP ORG  200  LAB  446001

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.   AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO     18       -3    -1       -3    +1       -5    +1
   PARS    (   8)   ( -3) ( +8)    ( -3) ( +5)    ( -3) ( +5)

I11101 HIV    50      TOTAL          -19   +15
   PARS    (  63)                  ( -5) ( +6)

REGION  09  STATE  29  NEVADA                     REP ORG  300  LAB  446002

                      ----------------PROBABILITY LIMITS-----------------

 POL.CD.   AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO     18       -7    +4       -3    +3       -2    +0
   PARS    (   4)   ( +0) ( +0)    (-13) ( +9)    ( -5) ( +3)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85                    DATA SELECTED FOR YEAR 1982

REGION  10  STATE  38  OREGON                         REP ORG  001  LAB  453001

                       -----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                       LOW    UP        LOW    UP        LOW    UP        LOW    UP

C42101 CO       24      -22    +10       -6     +7        -5     +5
   PARS      (  57)   (-18) (+24)     ( -8) ( +8)      ( -7) ( +3)

I12128 LEAD     12       -9    +16       -8    +10        -1     +1
   PARS      (   6)   ( -5) ( +9)     ( -4) ( +7)

REGION  10  STATE  49  WASHINGTON                     REP ORG  001  LAB  452001

                       -----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                       LOW    UP        LOW    UP        LOW    UP        LOW    UP

I11101 HIV      78     TOTAL             -21    +15
   PARS      (  29)                   ( -4) ( +7)

REGION  10  STATE  49  WASHINGTON                     REP ORG  001  LAB  452006

                       -----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                       LOW    UP        LOW    UP        LOW    UP        LOW    UP

C42101 CO       11      -13     +4       -1     +2        -2     +1
   PARS      (  39)   ( -6) ( +6)     ( -4) ( +3)      ( -4) ( +2)

I12128 LEAD      6      +10    +14       +0     +0        -9     +7
   PARS      (   7)   ( -5) ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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TABLE C2. PARS AND PA DATA FOR SO_2 CONTINUOUS

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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

         COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85          DATA SELECTED FOR YEAR 1982

REGION  01  STATE  41  RHODE ISLAND              REP ORG  001  LAB  305001

                  ---------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     8      -13    +1      -3    +0      -4    +3
   PARS     (  13)  ( -7) (+14)   ( -9) (+14)   ( -5) (+13)

REGION  01  STATE  47  VERMONT                   REP ORG  001  LAB  303001

                  ---------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     3       +3    +3      +1    +3
   PARS     (   9)  ( -7) ( +2)   ( -6) ( +1)   ( -6) ( +3)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85            DATA SELECTED FOR YEAR 1982

REGION  01  STATE  07  CONNECTICUT                  REP ORG  001  LAB  306001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42401 SO2     20     -10    +4      -9    +1      -8    +0
   PARS     (  14)  ( -8) ( +4)   ( -8) ( +3)   ( -8) ( +5)

REGION  01  STATE  20  MAINE                        REP ORG  001  LAB  301001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42401 SO2      4      -7    -7      -5    -3      -2    -2
   PARS     (   9)  ( -8) ( +3)   ( -6) ( +5)   ( -6) ( +7)

REGION  01  STATE  22  MASSACHUSETTS                REP ORG  001  LAB  304001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42401 SO2     12      -7    +5      -3    +0      -6    +3
   PARS     (  33)  ( -9) ( +6)   ( -9) ( +4)   ( -9) ( +6)

REGION  01  STATE  30  NEW HAMPSHIRE                REP ORG  001  LAB  302001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42401 SO2      4      -4    -4      -6    -2      -4    -4
   PARS     (  33)  ( -8) ( +6)   ( -9) ( +6)   ( -9) ( +6)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

             COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85            DATA SELECTED FOR YEAR 1982

REGION  02  STATE  31  NEW JERSEY                   REP ORG  001  LAB  308001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42401 SO2     16        -8    -3       -6    +0       -4    +2
   PARS     (  16)    (-14) (+13)    ( -9) (+12)    ( -8) (+12)

REGION  02  STATE  33  NEW YORK                     REP ORG  001  LAB  307001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42401 SO2     12       -18   +27       -8   +13       -6    +7
   PARS     (  88)    ( -8) (+11)    ( -8) (+11)    (-10) (+12)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85             DATA SELECTED FOR YEAR 1982

REGION  03  STATE  08  DELAWARE                     REP ORG  001  LAB  313002

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                     LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42401 SO2     12     -10     -4    -12     +8    -14    +10
   PARS     (   8)   (-12) (+16)  ( -1) (+10)  ( -8) (+18)

REGION  03  STATE  21  MARYLAND                     REP ORG  001  LAB  312001

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                     LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42401 SO2     20     -17    +17     -2    +13     +2    +10
   PARS     (  40)   (-20) (+15)  (-12) (+11)  (-12) (+12)

REGION  03  STATE  39  PENNSYLVANIA                 REP ORG  001  LAB  311002

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                     LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42401 SO2     12     -25    +11    -13     +5    -12     +5
   PARS     (  27)   (-15) (+13)  (-15) (+10)  (-12) (+10)

REGION  03  STATE  39  PENNSYLVANIA                 REP ORG  002  LAB  411002

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                     LOW     UP     LOW     UP     LOW     UP     LOW     UP

C42401 SO2     12      -4     +2     +1     +4     +1     +6
   PARS     (  77)   (-17) (+15)  (-13) (+11)  (-15) (+12)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

             COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85          DATA SELECTED FOR YEAR 1982

REGION  03  STATE  39  PENNSYLVANIA                  REP ORG  003  LAB  411001

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42401 SO2       4      +20    +20      +8     +9      +7     +7
   PARS      (   11)  (-22) (+12)    (-16) (+12)    (-12) (+11)    ( -6) ( +6)

REGION  03  STATE  48  VIRGINIA                      REP ORG  003  LAB  415004

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42401 SO2      16      -10     -1      -9     +2     -10     +3
   PARS      (   12)  ( -8) ( +6)    ( -7) (+11)    (-10) (+12)

REGION  03  STATE  50  WEST VIRGINIA                 REP ORG  001  LAB  314001

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42401 SO2       4       -1     -1      -2     +0      -1     -1
   PARS      (    9)  ( -9) (+13)    ( -8) ( +9)    (-10) (+10)

REGION  03  STATE  50  WEST VIRGINIA                 REP ORG  002  LAB  314002

                 ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42401 SO2       4       -1     -1      +0     +3      +2     +2
   PARS      (    9)  (-10) ( +6)    ( -8) ( +7)    ( -8) ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85            DATA SELECTED FOR YEAR 1982

REGION  04  STATE  01  ALABAMA                    REP ORG  011  LAB  319001

                      ----------------PROBABILITY LIMITS------------------

 POL.CD.     AUDITS       LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42401 SO2       4       -71    -71    -87    -86    -88    -88
   PARS      (   5)    (-17)  (-12)  (-19)  (-12)  (-18)  (-12)

REGION  04  STATE  10  FLORIDA                    REP ORG  011  LAB  423003

                      ----------------PROBABILITY LIMITS------------------

 POL.CD.     AUDITS       LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42401 SO2       8       -19    -11    -18     -6    -20     -4
   PARS      (  19)    (-20)  (+16)  (-19)  (+15)  (-14)  (+12)

REGION  04  STATE  10  FLORIDA                    REP ORG  012  LAB  423004

                      ----------------PROBABILITY LIMITS------------------

 POL.CD.     AUDITS       LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42401 SO2       8        +2    +14     +4    +10     +4     +6
   PARS      (   5)    ( -1)  (+13)  (-18)  (+21)  (-15)  (+22)

REGION  04  STATE  10  FLORIDA                    REP ORG  018  LAB  423002

                      ----------------PROBABILITY LIMITS------------------

 POL.CD.     AUDITS       LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42401 SO2       4       -10    -10    -15    -11    -14    -14
   PARS      (   4)    (-20)  ( +0)  (-21)  ( -2)  (-15)  ( -3)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

         COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85             DATA SELECTED FOR YEAR 1982

REGION  04  STATE  18  KENTUCKY                   REP ORG  002  LAB  416001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     12      +0    +4      -1    +2      -2    +1
   PARS     (   4)  ( -9) (+16)  ( +3) (+12)  ( -6) ( +6)

REGION  04  STATE  34  NORTH CAROLINA             REP ORG  001  LAB  318001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     18     -28   +36     -26   +30     -27   +30     +12   +12
   PARS     (  21)  (-15) (+10)  (-17) (+12)  (-15) (+11)   (-12) ( +2)

REGION  04  STATE  34  NORTH CAROLINA             REP ORG  003  LAB  418006

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2      4      -6    -6      -7    -6      -7    -7
   PARS     (  12)  (-28) ( +8)  (-27) ( +8)  (-30) (+10)

REGION  04  STATE  42  SOUTH CAROLINA             REP ORG  001  LAB  320001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2      6     -24   -24      -3    +5      +2    +7
   PARS     (  75)  (-14) (+11)  (-11) (+10)  (-11) ( +9)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85             DATA SELECTED FOR YEAR 1982

REGION  04  STATE  44  TENNESSEE                  REP ORG  001  LAB  317001

                    ----------------PROBABILITY LIMITS-----------------
 POL.CD.     AUDITS     LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                      LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2     14     -18    +16       -15    +10       -15    +10       -17     +6
   PARS      (  14)  (-13)  ( +8)    ( -6)  ( +5)    ( -9)  ( +5)    (-14)  ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM
          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85      DATA SELECTED FOR YEAR 1982

REGION  05  STATE  36  OHIO                      REP ORG  003  LAB  327005

                      ---------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2      8     -19   +13     -15    +9     -20   +13
   PARS     (   2)   (-23) (-10)   (-15) (-10)   (-12) ( +9)

REGION  05  STATE  36  OHIO                      REP ORG  006  LAB  427001

                      ---------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     12     -31   +22     -18   +14      -7    -5
   PARS     (   4)   (-27) (+20)   ( -9) (+13)   ( -6) (+12)

REGION  05  STATE  36  OHIO                      REP ORG  007  LAB  427002

                      ---------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2      8      -6   +19      -4   +12      -8   +19
   PARS     (   8)   (-11) (+17)   ( -6) (+11)   (-10) (+13)

REGION  05  STATE  36  OHIO                      REP ORG  008  LAB  427003

                      ---------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     12      -5    +7      -2    +5      -2    +4
   PARS     (   8)   (-10) ( +5)   ( -6) ( +6)   ( -7) ( +7)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85             DATA SELECTED FOR YEAR 1982

REGION  05  STATE  36  OHIO                        REP ORG  012  LAB  427007

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     8       -3   +20      -4   +18      -1   +11
   PARS     (   4)   (-24) (+29)   (-15) (+17)   (-20) (+21)

REGION  05  STATE  36  OHIO                        REP ORG  013  LAB  427010

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     8      -29   +19     -19    +8     -16    +9
   PARS     (   2)   ( -7) ( -4)   (-12) ( -4)   (-12) ( -5)

REGION  05  STATE  36  OHIO                        REP ORG  016  LAB  427012

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     4      -16   -16     -19   -17     -20   -20
   PARS     (   6)   (-34) (+10)   (-29) (+10)   (-28) ( +6)

REGION  05  STATE  51  WISCONSIN                   REP ORG  001  LAB  325001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     8      -48   +32     -24   +12     -20   +10
   PARS     (  19)   (-15) (+16)   (-12) (+10)   (-12) ( +6)   (-11) ( -3)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  1/04/85              DATA SELECTED FOR YEAR 1982

REGION  06  STATE  32  NEW MEXICO                 REP ORG  001  LAB  330001

                ----------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     14     -34    +5     -25    +0     -28    +2     -14    -5
   PARS     (   8)  (-11) ( +6)  (-11) ( +7)  (-11) ( +9)

REGION  06  STATE  32  NEW MEXICO                 REP ORG  002  LAB  430001

                ----------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2      4      +6    +6      +4    +5      +4    +4
   PARS     (  11)  (-16) ( +6)  (-15) ( +5)  (-13) ( +5)  (-16) ( +5)

REGION  06  STATE  37  OKLAHOMA                   REP ORG  101  LAB  331001

                ----------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2      4      +7    +7      +4    +5      +3    +3
   PARS     (   2)  (-11) ( -9)  (-14) ( -4)  (-13) ( -9)

REGION  06  STATE  37  OKLAHOMA                   REP ORG  102  LAB  431001

                ----------------PROBABILITY LIMITS----------------

 POL.CD.    AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                      LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2      4     +17   +17      +2   +10      +9    +9
   PARS     (   3)                 (-22) ( +1)  (-26) ( +1)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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TABLE C2. PARS and PA Data for SO_2 Continuous

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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

           COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/85            DATA SELECTED FOR YEAR 1982            PAGE NO.    1

REGION  01  STATE  07  CONNECTICUT                REP ORG  001  LAB  306001

                    -----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                         LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2     20        -10     +4       -9      +1       -8      +0
   PARS      ( 14)     ( -8) ( +4)    ( -8) ( +3)     ( -8) ( +5)

REGION  01  STATE  20  MAINE                      REP ORG  001  LAB  301001

                    -----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                         LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2      4        -7      -7       -5      -3       -2      -2
   PARS      (  9)     ( -8) ( +3)    ( -6) ( +5)     ( -6) ( +7)

REGION  01  STATE  22  MASSACHUSETTS              REP ORG  001  LAB  304001

                    -----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                         LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2     12        -7      +5       -3      +0       -6      +3
   PARS      ( 33)     ( -9) ( +6)    ( -9) ( +4)     ( -9) ( +6)

REGION  01  STATE  30  NEW HAMPSHIRE              REP ORG  001  LAB  302001

                    -----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                         LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2      4        -4      -4       -6      -2       -4      -4
   PARS      ( 33)     ( -8) ( +6)    ( -9) ( +6)     ( -9) ( +6)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

            COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/83              DATA SELECTED FOR YEAR 1982            PAGE NO.   2

REGION  01   STATE  41  RHODE ISLAND                  REP ORG  001  LAB  305001

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP        LOW    UP        LOW    UP        LOW    UP

C42401 SO2       8      -13    +1        -3     +0        -4     +3
   PARS       ( 13)   ( -7) (+14)     ( -9) (+14)     ( -5) (+13)

REGION  01   STATE  47  VERMONT                       REP ORG  001  LAB  303001

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP        LOW    UP        LOW    UP        LOW    UP

C42401 SO2       3       +3    +3        +1     +3
   PARS       (  9)   ( -7) ( +2)     ( -6) ( +1)     ( -6) ( +3)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

                COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/85                DATA SELECTED FOR YEAR 1982            PAGE NO.    4

REGION  02  STATE  31  NEW JERSEY                      REF ORG  001  LAB  306001

                         -----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP        LOW    UP        LOW    UP        LOW    UP

C42401 SO2      16       -8     -3        -6    +0        -4    +2
   PARS       ( 16)    (-14) (+13)     ( -9) (+12)     ( -6) (+12)

REGION  02  STATE  33  NEW YORK                        REF ORG  001  LAB  307001

                         -----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP        LOW    UP        LOW    UP        LOW    UP

C42401 SO2      12      -18    +27        -8    +13       -6    +7
   PARS       ( 88)    ( -8) (+11)     ( -8) (+11)     (-10) (+12)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/85            DATA SELECTED FOR YEAR 1982              PAGE NO.    6

REGION  03   STATE  08  DELAWARE                        REF ORG  001  LAB  313002

                      ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2          LEVEL 3         LEVEL 4
                       LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42401 SO2     12      -10    -4       -12    +6       -14   +10
   PARS      (   8)  (-12) (+16)     ( -1) (+10)     ( -6) (+16)

REGION  03   STATE  21  MARYLAND                        REF ORG  001  LAB  312001

                      ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2          LEVEL 3         LEVEL 4
                       LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42401 SO2     20      -17   +17        -2   +13        +2   +10
   PARS      (  40)  (-20) (+15)     (-12) (+11)     (-12) (+12)

REGION  03   STATE  39  PENNSYLVANIA                    REF ORG  001  LAB  311002

                      ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2          LEVEL 3         LEVEL 4
                       LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42401 SO2     12      -25   +11       -13    +5       -12    +5
   PARS      (  27)  (-15) (+13)     (-15) (+10)     (-12) (+10)

REGION  03   STATE  39  PENNSYLVANIA                    REF ORG  002  LAB  411002

                      ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS      LEVEL 1         LEVEL 2          LEVEL 3         LEVEL 4
                       LOW    UP       LOW    UP       LOW    UP       LOW    UP

C42401 SO2     12       -4    +2        +1    +4        +1    +6
   PARS      (  77)  (-17) (+15)     (-13) (+11)     (-15) (+12)

   * ZERO PROBABILITY LIMITS ARE INCLUDE[illegible] THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM
              COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/83               DATA SELECTED FOR YEAR 1982              PAGE NO.    7

REGION  03  STATE  39  PENNSYLVANIA                    REP ORG  003  LAB  411001
                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP        LOW    UP        LOW    UP        LOW    UP

C42401 SO2      4      +20    +20        +8     +9        +7     +7
   PARS      (  11)   (-22)  (+12)     (-16)  (+12)     (-12)  (+11)     ( -6)  ( +6)
REGION  03  STATE  48  VIRGINIA                        REP ORG  003  LAB  415004
                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP        LOW    UP        LOW    UP        LOW    UP

C42401 SO2     16      -10     -1        -9     +2       -10     +3
   PARS      (  12)   ( -8)  ( +6)     ( -7)  (+11)     (-10)  (+12)
REGION  03  STATE  50  WEST VIRGINIA                   REP ORG  001  LAB  314001
                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP        LOW    UP        LOW    UP        LOW    UP

C42401 SO2      4       -1     -1        -2     +0        -1     -1
   PARS      (   9)   ( -9)  (+13)     ( -8)  ( +9)     (-10)  (+10)
REGION  03  STATE  50  WEST VIRGINIA                   REP ORG  002  LAB  314002
                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW    UP        LOW    UP        LOW    UP        LOW    UP

C42401 SO2      4       -1     -1        +0     +3        +2     +2
   PARS      (   9)   (-10)  ( +6)     ( -8)  ( +7)     ( -8)  ( +7)

 * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM
                 COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/85            DATA SELECTED FOR YEAR 1982                PAGE NO.   9
REGION  04   STATE  01  ALABAMA                             REP ORG  011  LAB  319001
                       ----------------PROBABILITY LIMITS-----------------
 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3         LEVEL 4
                        LOW     UP     LOW     UP     LOW     UP      LOW     UP
C42401 SO2       4      -71    -71     -87    -86     -88    -88
  PARS       (   5)   (-17) (-12)   (-19) (-12)   (-18) (-12)
REGION  04   STATE  10  FLORIDA                             REP ORG  011  LAB  423003
                       ----------------PROBABILITY LIMITS-----------------
 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3         LEVEL 4
                        LOW     UP     LOW     UP     LOW     UP      LOW     UP
C42401 SO2       8      -19    -11     -18     -6     -20     -4
  PARS       (  19)   (-20) (+16)   (-19) (+15)   (-14) (+12)
REGION  04   STATE  10  FLORIDA                             REP ORG  012  LAB  423004
                       ----------------PROBABILITY LIMITS-----------------
 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3         LEVEL 4
                        LOW     UP     LOW     UP     LOW     UP      LOW     UP
C42401 SO2       8       +2    +14      +4    +10      +4     +6
  PARS       (   5)   ( -1) (+13)   (-18) (+21)   (-15) (+22)
REGION  04   STATE  10  FLORIDA                             REP ORG  013  LAB  423016
                       ----------------PROBABILITY LIMITS-----------------
 POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3         LEVEL 4
                        LOW     UP     LOW     UP     LOW     UP      LOW     UP
C42401 SO2      17       -9    +22      -5    +10      -6     +9      +2     +2
  PARS       (  17)   (-21) (+10)   (-17) (+13)   (-16) ( +8)    ( -3) ( -3)

  * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/83             DATA SELECTED FOR YEAR 1982              PAGE NO.   10

REGION  04   STATE  10  FLORIDA                           REP ORG  018  LAB  423002

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.      AUDITS      LEVEL 1        LEVEL 2        LEVEL 3         LEVEL 4
                        LOW     UP     LOW     UP     LOW     UP      LOW     UP

C42401 SO2       4      -10    -10     -15    -11     -14    -14
   PARS       (  4)   (-20) ( +0)   (-21) ( -2)   (-15) ( -3)

REGION  04   STATE  18  KENTUCKY                          REP ORG  002  LAB  418001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.      AUDITS      LEVEL 1        LEVEL 2        LEVEL 3         LEVEL 4
                        LOW     UP     LOW     UP     LOW     UP      LOW     UP

C42401 SO2      12       +0     +4      -1     +2      -2     +1
   PARS       (  4)   ( -9) (+16)   ( +3) (+12)   ( -6) ( +6)

REGION  04   STATE  34  NORTH CAROLINA                    REP ORG  001  LAB  318001

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.      AUDITS      LEVEL 1        LEVEL 2        LEVEL 3         LEVEL 4
                        LOW     UP     LOW     UP     LOW     UP      LOW     UP

C42401 SO2      18      -28    +36     -26    +30     -27    +30      +12    +12
   PARS       ( 21)   (-15) (+10)   (-17) (+12)   (-15) (+11)    (-12) ( +2)

REGION  04   STATE  34  NORTH CAROLINA                    REP ORG  003  LAB  418006

                    ----------------PROBABILITY LIMITS-----------------

 POL.CD.      AUDITS      LEVEL 1        LEVEL 2        LEVEL 3         LEVEL 4
                        LOW     UP     LOW     UP     LOW     UP      LOW     UP

C42401 SO2       4       -6     -6      -7     -6      -7     -7
   PARS       ( 12)   (-28) ( +8)   (-27) ( +8)   (-30) (+10)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

           COMPARISON REPORT OF GADHS ACCURACY AUDITS & PARS
DATE  3/16/83            DATA SELECTED FOR YEAR 1982            PAGE NO.   11

REGION  04  STATE  42  SOUTH CAROLINA                  REF ORG  001  LAB  320001

                   ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2         LEVEL 3         LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW     UP

C42401 SO2      6       -24    -24       -3    +5        +2    +7
   PARS      ( 75)    (-14) (+11)     (-11) (+10)     (-11) ( +9)

REGION  04  STATE  44  TENNESSEE                       REF ORG  001  LAB  317001

                   ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2         LEVEL 3         LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW     UP

C42401 SO2     14       -18    +16      -15    +10      -15    +10      -17     +6
   PARS      ( 14)    (-13) ( +6)     ( -6) ( +5)     ( -9) ( +5)     (-14) ( +7)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/83             DATA SELECTED FOR YEAR 1982               PAGE NO.   13

REGION  05   STATE  36  OHIO                            REP ORG  003  LAB  327005

                           ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2       8      -19    +13       -15     +9       -20    +13
   PARS      (   2)   (-23) (-10)     (-15) (-10)      (-12) ( +9)

REGION  05   STATE  36  OHIO                            REP ORG  006  LAB  427001

                           ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2      12      -31    +22       -18    +14        -7     -5
   PARS      (   4)   (-27) (+20)     ( -9) (+13)      ( -6) (+12)

REGION  05   STATE  36  OHIO                            REP ORG  007  LAB  427002

                           ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2       8       -6    +19        -4    +12        -8    +19
   PARS      (   8)   (-11) (+17)     ( -6) (+11)      (-10) (+13)

REGION  05   STATE  36  OHIO                            REP ORG  008  LAB  427003

                           ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2      12       -5     +7        -2     +5        -2     +4
   PARS      (   8)   (-10) ( +5)     ( -6) ( +6)      ( -7) ( +7)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

           COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/85              DATA SELECTED FOR YEAR 1982              PAGE NO.   14

REGION  05  STATE  36  OHIO                               REF ORG  012  LAB  427007

                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.      AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2       8       -3    +20       -4    +18       -1    +11
   PARS       (  4)    (-24) (+29)     (-15) (+17)     (-20) (+21)

REGION  05  STATE  36  OHIO                               REF ORG  013  LAB  427010

                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.      AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2       8      -29    +19      -19     +8      -16     +9
   PARS       (  2)    ( -7) ( -4)     (-12) ( -4)     (-12) ( -5)

REGION  05  STATE  36  OHIO                               REF ORG  016  LAB  427012

                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.      AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2       4      -16    -16      -19    -17      -20    -20
   PARS       (  6)    (-34) (+10)     (-29) (+10)     (-28) ( +6)

REGION  05  STATE  51  WISCONSIN                          REF ORG  001  LAB  325001

                     ----------------PROBABILITY LIMITS-----------------

 POL.CD.      AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                        LOW     UP       LOW     UP       LOW     UP       LOW     UP

C42401 SO2       8      -48    +32      -24    +12      -20    +10
   PARS       ( 19)    (-15) (+16)     (-12) (+10)     (-12) ( +6)     (-11) ( -3)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

             COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/85           DATA SELECTED FOR YEAR 1982              PAGE NO.  16

REGION  06   STATE  32  NEW MEXICO                      REF ORG  001  LAB  330001

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS       LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42401 SO2      14       -34     +5      -25     +0      -28     +2      -14     -5
   PARS      (   5)    (-11) ( +6)     (-11) ( +7)     (-11) ( +9)

REGION  06   STATE  37  OKLAHOMA                        REF ORG  101  LAB  331001

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS       LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42401 SO2       4        +7     +7       +4     +5       +3     +3
   PARS      (   2)    (-11) ( -9)     (-14) ( -4)     (-13) ( -9)

REGION  06   STATE  37  OKLAHOMA                        REF ORG  102  LAB  431001

                  ----------------PROBABILITY LIMITS-----------------

 POL.CD.     AUDITS       LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

C42401 SO2       4       +17    +17       +2    +10       +9     +9
   PARS      (   3)                    (-22) ( +1)     (-26) ( +1)

 * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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ENVIRONMENTAL PROTECTION AGENCY   EMSL PRECISION/ACCURACY REPORTING SYSTEM

          COMPARISON REPORT OF QADHS ACCURACY AUDITS & PARS
DATE  3/16/85             DATA SELECTED FOR YEAR 1982            PAGE NO.   22

REGION  09  STATE  05  CALIFORNIA                   REP ORG  036  LAB  445003

                     ------------------PROBABILITY LIMITS-------------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42401 SO2     15      -38   +25     -29   +21     -31   +24     -31   +26
   PARS      (  6)   (-18) (+16)   ( -3) ( +1)   ( -1) (+18)   (-10) (+29)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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